

# ***Unit Strategic Fire Plan***

## ***SISKIYOU UNIT***



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# UNIT STRATEGIC FIRE PLAN AMENDMENTS

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## ***SIGNATURE PAGE***

### **Unit Strategic Fire Plan developed for Siskiyou Unit**

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre-fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met, as necessary.



**Unit Chief**

Phillip R. Anzo

**Date:** 5/5/2022



**Fire Captain/ Pre-Fire Engineer**

Jake Burgess

**Date:** 5/5/2022

## EXECUTIVE SUMMARY

The 2022 Fire Plan reflects CAL FIRE Siskiyou Unit's focus on fire prevention and suppression activities to protect lives, property, and natural resources. Through collaboration among local, state, federal, tribal, and private partners we will progress towards a more fire resilient wildland-urban interface and natural environment. This may include working together to implement a single fuel break and/or a large landscape level fuel reduction project and /or working together to develop a Community Wildfire Protection Plan. Community protection includes promoting the safety of the public and emergency responders, as well as protection of property and other improvements.

The Siskiyou Unit Fire Plan will be successful by meeting the following goals:

1. Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems.
2. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
3. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
4. Support and participate in the collaborative development and implementation of local, county, and regional plans that address fire protection and landowner objectives.
5. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
6. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
7. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
8. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
9. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

Through collaborative efforts and hard-work the Siskiyou Unit Fire Plan will guide us towards a more fire resilient future using pre-fire efforts.

## SECTION I: UNIT OVERVIEW

### UNIT DESCRIPTION

The Siskiyou Unit (SKU) is in Northern California along the Oregon border and is comprised of Siskiyou County. The Siskiyou Unit encompasses 1.4 million acres of ecologically diverse State Responsibility Area wildlands. Ecotypes range from high desert in the east, to the magnificent coniferous forests of the Klamath River drainage to the lush ranch lands carpeting the interior valleys.

Magnificent Mt. Shasta serves as the Unit's geographical centerpiece rising abruptly to an astonishing 14,179 feet in elevation. The County is drained by the Sacramento River in the south, the Klamath River in the north and the Salmon River in the west.

The weather patterns in Siskiyou County are as diverse as its ecology. Summer temperatures may climb into the 100's, while winter temperatures may drop well below freezing with significant snowstorms common throughout the winter months. Fuel types in the Unit include timber, timber with a grass understory, grass, brush, oak woodland, desert sage and western juniper stands. Like most mountainous areas, Siskiyou County may experience a high occurrence of lightning activity during the summer months. Ranching, recreation, and the timber industry fuel Siskiyou County's economy. The summer months see a large influx of tourists who take advantage of the County's wide-open spaces for outdoor recreation including, hunting, fishing, white-water rafting, mountain climbing and camping.

Most of the large fires in the Siskiyou Unit over the past 50 years have been wind driven fires. Lightning, equipment-use, and debris burning have historically been the determined lead ignition sources for these large fires.

The Klamath National Forest, Shasta-Trinity National Forest and the Bureau of Land Management are the largest public land ownerships adjacent to the Unit. Other public lands include the Shasta Valley, Horseshoe Ranch, Butte Valley, Lower Klamath, and Tulelake Wildlife Refuge Areas.

In June of 2010, the Fire and Resource Assessment Program (FRAP) released *California's Forest and Rangelands: 2010 Assessment*. As part of the assessment, states were required to identify key issues and define the status and trends throughout the forests. Furthermore, states were asked to identify specific geographic areas, called "priority landscapes". The intent of identifying "priority landscapes" was to assist investment and other programs focusing on the issue areas. The assessment identifies forest and rangeland issues throughout the state including Siskiyou County. The assessment also identifies strategies to address these issues. The complete assessment can be found on the CAL FIRE FRAP Website. The "priority landscapes" identified within the Siskiyou Unit will be considered during the planning phase of future projects within the Unit. The following "priority landscapes" and strategies have been identified within the Siskiyou Unit:

#### *Wildfire Threats to Ecosystem Health and Community Safety*

Developing coherent strategies involves collaborative planning, given the unique and disparate audience for dealing with the threat (i.e., numerous individual landowners). In terms of

protecting communities, this is discussed in detail in Chapter 3.3: Planning for and Reducing Wildfire Risks to Communities.

#### *Sustainable Working Forests and Rangelands*

Opportunities exist for landowner assistance to enhance productivity and health of working landscapes. Risk Reduction on Forestlands: Identifies areas with timber and biomass energy assets that are threatened by wildfire and forest pests. Risk Reduction on Rangelands; identifies areas where rangeland productivity is threatened by wildfire. Restoring Impacted Timberlands: identifies areas with timber and biomass energy assets that have been impacted by past wildfires or forest pest outbreaks.

#### *Forest Pests and Other Threats to Ecosystem Health and Community Safety*

Forest management tools include the removal of dead, dying, and diseased trees, thinning of small and medium live trees, replanting multiple species, and other techniques used to remove hazards and improve ecosystem health. In California, responsibility for the control of forest pest outbreaks often falls to the California Department of Forestry and Fire Protection (CAL FIRE) on state- and privately-owned lands and the U.S. Forest Service on federal lands. CAL FIRE, with the approval of the California Board of Forestry and Fire Protection (BOF), can declare a zone of infestation for native and exotic insect and disease pests. Within a Zone of Infestation CAL FIRE employees may go on private lands to attempt eradication or control in a manner approved by the Board of Forestry.

#### *Water Quality and Quantity Protection and Enhancement*

Protecting and managing forests in source watersheds is an essential part of future strategies for providing a sustainable supply of clean water for a broad range of beneficial uses. Tools to address threats to water supplies include water conservation, restoration of riparian forests, restoration of mountain meadows, and protection of groundwater. Tools to address water quality concerns include reduction of soil erosion through Best Management Practices for forest roads and timber harvesting, additional protection for riparian areas in salmonid watersheds, road maintenance and fuel reduction treatments designed to reduce high severity wildfires.

#### *Planning for Reducing Wildfire Risks to Communities*

In California, community involvement in wildfire planning is extensive, as evidenced for example, by Community Wildfire Protection Plans (CWPP), as defined under the Healthy Forests Restoration Act of 2003), local and regional Fire Safe Councils, Resource Conservation Districts, and community participation in the federal Fire wise Communities/USA program. State laws requiring “defensible space” around structures, building codes, and other responsibilities are aimed at helping communities reduce their risk of loss when wildfire strikes. Federal programs, such as the National Fire Plan, also help with funding for fire hazard reduction.

#### *Emerging Markets for Forests and Rangeland Products and Services*

Strengthen and develop new market opportunities for forest products and benefits provide incentives for forest stewardship and conservation. Emerging markets for renewable energy, ecosystem services and niche products area impacting how forest and rangelands are managed. Developing appropriate policies will require a better understanding of the benefits and environmental impacts of these emerging markets and how society values the various market and non-market products and services provided by forests and rangelands.

#### *Plant, Wildlife, and Fish Habitat Protection, Conservation and Enhancement*

Numerous efforts in California are working towards identifying and protecting important wildlife, plant, and fish habitat. Tools for addressing wildlife habitat needs include the purchase of land and conservation easements, development planning, zoning, habitat mitigation banking, and habitat restoration, and policies, regulations and funding mechanisms that support these efforts.

#### *Climate Change: Threats and Opportunities*

The California Department of Forestry and Fire Protection (CAL FIRE) has identified five strategies to mitigate against greenhouse gas (GHG) emissions: reforestation, forestland conservation, fuels reduction, urban forestry, and forest management to improve carbon sequestration.

## **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

At the peak of firefighting preparedness, Siskiyou Unit suppression resources include approximately 70 career personnel and 120 seasonal personnel. The Siskiyou Unit is geographically divided into four fire battalions. Within these battalions the Siskiyou Unit has resources and facilities strategically located. These include: seven fire stations, one conservation camp, and a headquarters facility. During summer months, thirteen schedule “B” engines, two dozers, up to four inmate fire crews, and up to three fire lookouts are staffed. Through augmentation funding the Unit will staff a Firefighter I hand crew and an additional dozer. The fire lookouts are staffed based upon fire, weather, and lightning activity levels. In the winter months, Siskiyou Unit staffs four stations with fiscal assistance from the County Amador Plan. Two of these stations are staffed year-round with one engine each that are state funded.

The Siskiyou Unit has an Emergency Command Center known as the Yreka Interagency Command Center (YICC). The YICC is located at the Siskiyou Unit Headquarters in Yreka and is a collaboration of CAL FIRE, United States Forest Service (USFS) and County of Siskiyou staff. The YICC provides dispatching services for CAL FIRE, USFS, 30 local government departments and 5 ambulance companies. The YICC is responsible for emergency call taking, dispatching, and tracking of resources. The YICC has an Emergency Dispatcher at the console 24 hours a day. The Goal of the YICC is to meet and exceed the standards set in NFPA 1221 section 6.4.2. These standards specify that 95 percent of all alarms be answered within 15 seconds and 99 percent answered within 40 seconds. In addition, Section 6.4.3 specifics that 95 percent of all dispatching be completed within 60 seconds.

Battalion I (Scott Valley Battalion) is in the northwest portion of the Unit. Within the Battalion there is a CAL FIRE station located in the City of Fort Jones. The Fort Jones Station houses three Type III fire engines and one Type II fire dozer. Deadwood Conservation Camp is located north of Fort Jones along McAdams Creek. Deadwood is an 80-man camp and is capable of providing four Type I hand crews. There are two fire lookouts located within the Scott Valley Battalion, Quartz Hill, and Duzel Rock.

Battalion II (Shasta Valley Battalion) is centrally located in the northern portion of the Unit. Within the Shasta Valley Battalion there are two CAL FIRE stations. One station is in Yreka, and one is in Hornbrook. The Yreka Station is considered the headquarters station and houses three Type III fire engines and one Type II dozer. Hornbrook Station is located along Interstate 5 near the California and Oregon border in the town of Hornbrook. This station houses two Type III fire engines. Paradise Craggy serves as the fire lookout for the Shasta Valley

Battalion. The Battalion also houses the augmented Firefighter I crew.

Battalion III (Butte Valley Battalion) can be identified on a map as two distinct geographical areas separated by Federal Direct Protection Area. One portion of the Butte Valley Battalion is in the central portion of the Unit near the City of Weed. The other is in the northeast portion of the Unit and includes the Butte Valley and extends north to the Oregon border. Within the Butte Valley Battalion there are two CAL FIRE stations. One station is in Weed City. The Weed Station houses two Type III fire engines and serves as the battalion headquarters. The Macdoel station is in the town of Macdoel and houses one Type III engine.

Battalion IV (McCloud Battalion) is in the southern portion of the Unit. Within the McCloud Battalion there are two CAL FIRE stations. One is in McCloud and the other is in Pondosa. McCloud Station houses two Type III fire engines. Pondosa Station is located within Shasta County but is staffed and administered by the Siskiyou Unit. Pondosa Station houses two Type III fire engines.

## LOCAL FIRE DEPARTMENTS



The Siskiyou Unit is very appreciative of its local fire departments. Many of these departments are staffed completely by volunteers and whose personnel are often the first to arrive at fires, medical aids and other types of emergencies. Often these departments are located within Fire Protection Districts (FPDs) or Community Services Districts (CSDs) and are typically governed by elected boards of directors and have authority to levy taxes to support their work. Within the Siskiyou Unit, CAL FIRE reciprocates emergency services using Mutual Aid and Automatic Aid Agreements.

The following local fire departments exist within the Siskiyou Unit:

Etna City Fire Department	South Yreka Fire Protection District
Fort Jones City Fire Department	Yreka City Fire Department
Scott Valley Fire Protection District	Butte Valley Fire Protection District
Happy Camp Fire District	Dorris City Fire Department
Copco Lake Fire Protection District	Seiad Valley Fire Company
Gazelle Fire Protection District	Tennant Community Services District
Grenada Fire Protection District	Tulelake Fire Department
Hammond Ranch Fire Zone	Weed City Fire Department
Hilt Fire Protection District	Lake Shastina Community Service District
Hornbrook Fire Protection District	Castella Fire Protection District
Klamath River Fire Company	Dunsmuir City Fire Department
Mayten Fire Protection District	McCloud Community Services District
Montague Fire Protection District	Mt Shasta City Fire Department
Mt. Shasta Vista Fire Zone	Mount Shasta Fire Protection District
Salmon River Fire Company	Pleasant Valley Fire Zone

## SECTION II: COLLABORATION

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

#### Plan Development Team:

Organization	Title
Fire Safe Council Siskiyou County	Fire Safe Council Members
Lower Scott River FSC/Northern California Resource Center	Fire Safe Council Members
French Creek FSC/Northern California Resource Center	Fire Safe Council Members
Scott Valley FSC/Northern California Resource Center	Fire Safe Council Members
Yreka Area FSC/ Northern California Resource Center	Fire Safe Council Members
Juniper Flat FSC/Northern California Resource Center	Fire Safe Council Members
Rattlesnake Creek FSC/Northern California Resource Center	Fire Safe Council Members
Upper Mid Klamath Watershed Council/ Northern California Resource Center	Fire Safe Council Members
Scott Bar FSC/ Northern California Resource Center	Fire Safe Council Members
Seiad Creek FSC/ Northern California Resource Center	Fire Safe Council Members
Happy Camp Fire Safe Council	Fire Safe Council Members
Greater Weed Fire Safe Council	Fire Safe Council Members
Dunsmuir Fire Safe Council	Fire Safe Council Members
Mt. Shasta Fire Safe Council	Fire Safe Council Members
Weed City Fire Department	Fire Chief
Etna City Fire Department	Fire Chief
Fort Jones City	Elected Officials
Siskiyou County Board of Supervisors	Elected Officials

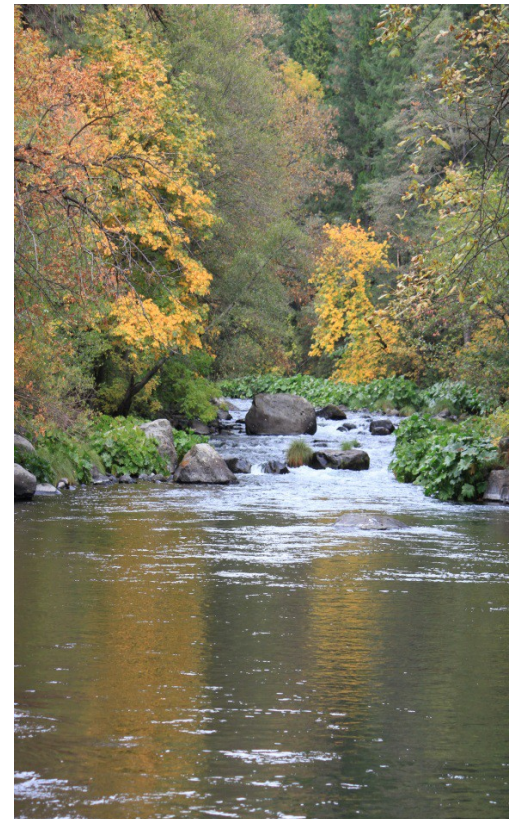
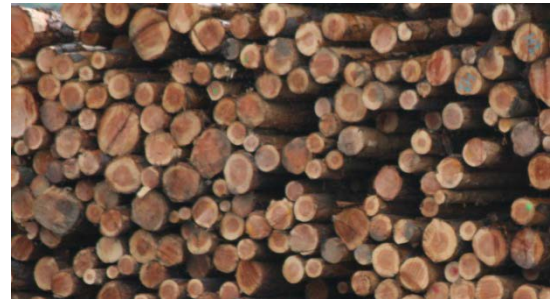
## SECTION III: VALUES

### A: VALUES

It is the goal of the Siskiyou Unit to protect life and property from the devastating effects of wildfire and other natural disasters. The Siskiyou Unit is vast in size and varied in its makeup of both natural and man-made assets at risk to wildfires.

The following are values identified at risk in the Siskiyou Unit:

- ☐ Citizen and firefighter safety
- ☐ Structures, residential and commercial
- ☐ Watershed and water
- ☐ Timber
- ☐ Rangelands
- ☐ Wildlife and associated habitat
- ☐ Infrastructure
- ☐ Air quality
- ☐ Unique areas (scenic, cultural, and historic)
- ☐ Recreation
- ☐ Soil erosion
- ☐ Hydroelectric power



## B: COMMUNITIES

To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. A fundamental step in achieving this goal was the identification of communities that are at high risk of damage from wildfire. These high-risk communities identified within the wildland-urban interface (WUI), the area where homes and wildlands intermix, were published in the Federal Register in 2001. At the request of Congress, the Federal Register notice only listed those communities neighboring federal lands. The list represents the collaborative work of the 50 states and five federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire.

The “Communities at Risk” in Siskiyou County listed in the table below are on the National Registry available at the following site: <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/fire-plan/communities-at-risk/>

Community	Federal Threat	Community	Federal Threat
Big Springs	F	Lower Scott River	F
Callahan	F	Macdoel	
Cecilville	F	McCloud	F
Dorris	F	Montague	
Dunsmuir	F	Mount Shasta	F
Etna	F	Quartz Valley Indian Reservation	F
Forks of Salmon	F	Sawyers Bar	F
Fort Jones	F	Scott Bar	F
Gazelle		Seiad Valley	F
Greenville	F	Somes Bar	F
Grenada		Tennant	F
Hamburg	F	Tulelake	F
Happy Camp	F	Weed	F
Hornbrook	F	Yreka	F
Horse Creek	F	*Hammond Ranch*	
Klamath River	F	**Mt. Shasta Forest**	
**Mt. Shasta Vista**		**Klamath River Country Estates**	

1. Federal Threat code of **F** indicates some or all the wildland fire threat to that community comes from federal (e.g., US Forest Service, BLM,) lands.
2. \* Indicates a community that is not yet designated as a Community at Risk by the State but is in the application process.
3. \*\* Identifies proposed Communities at Risk.

## FIRE HAZARD SEVERITY ZONES

While the entire County of Siskiyou is subject to varying degrees of fire hazard, there are specific features that make some areas more hazardous than others. The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather and other relevant factors. These maps were developed using science-based and field-tested computer models that assign a hazard score based on factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. There are three hazard zones in state responsibility areas: moderate, high and very high. These maps identify fire hazard and not fire risk. "Hazard" is based on the physical conditions that give a likelihood that an area will burn over a 30 to 50-year period without considering modifications such as fuel reduction efforts. "Risk" is the potential damage a fire can do to the area under existing conditions, including any modifications such as defensible space, irrigation and sprinklers, and ignition resistant building construction which can reduce fire risk. Risk considers the susceptibility of what is being protected.

These maps are intended to be used for:

- Implementing wildland-urban interface building standards for new construction.
- Natural hazard real estate disclosure at time of sale.
- Defensible Space/Home Hardening Disclosure (AB38) at time of sale.
- 100-foot defensible space clearance requirements around buildings.
- Property development standards such as road widths, water supply and signage.
- Consideration in city and county general plans.

Visit the CAL FIRE Website at <https://frap.fire.ca.gov/> to determine the fire hazard severity in a specific area



## SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

### A: FIRE PREVENTION



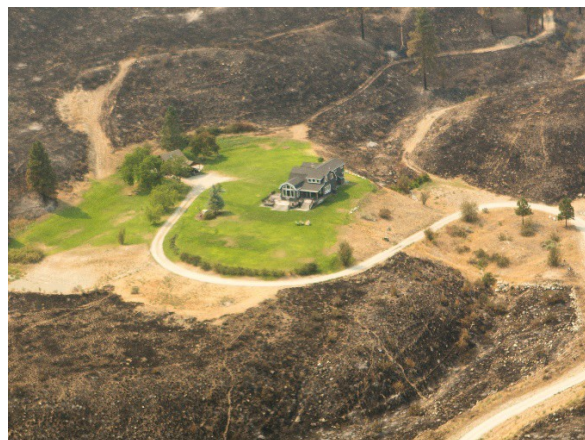
Fire Prevention activities in the Siskiyou Unit include, but are not limited to, the following: fire prevention education, hazardous fuel reduction and vegetation management, civil cost recovery, forest and fire law enforcement, fire prevention engineering, pre-fire planning, risk-analysis, volunteer programs and partnerships. In general, these programs have been shown to be highly effective at reducing the incidence of fire. The Siskiyou Unit contributes its success to the utilization of these main fire prevention components. In addition, the Prevention Bureau prides itself on providing quality public service in a timely, accurate, and courteous manner.



## ENGINEERING & STRUCTURE IGNITABILITY

### Public Resources Code 4290

These regulations have been prepared and adopted for establishing minimum wildfire protection standards in conjunction with building, construction, and development in State Responsibility Areas (SRA). These regulations became effective September 1, 1991. The future design and construction of structures, subdivisions, and developments in State Responsibility Area (SRA) shall provide for basic emergency access and perimeter wildfire protection measures as specified in Public Resources Code (PRC 4290). These measures shall provide for emergency access, signing and building numbering, private water supply reserves for emergency fire use, and vegetation modification. The fire protection standards contained within PRC 4290 shall specify the minimums for such measures. The Unit enforces PRC 4290 in its original form. The County of Siskiyou has not yet increased these standards.



## Public Resources Code 4291

One of the main objectives of the Siskiyou Unit is to ensure residents comply with the provisions set forth within California Public Resources Code 4291. This is accomplished through education and enforcement. It is important residents recognize that their first defense against wildfire is to create and maintain defensible space around their homes.

California Public Resources Code 4291 requires property owners in mountainous areas, forest-covered lands, or any land that is covered with flammable material to create at a minimum a 100-foot defensible space (or to the property line) around their homes and other structures.

The state legislature enacted PRC 4291 to improve fire safety and to help prevent catastrophic fires. Under the law, property owners or those who control a property must establish a:

- 30-foot clean zone (or to property line)
- 70-foot reduced fuel zone (or to property line)

This does not mean the property must be clear-cut to bare soil, it involves thinning and breaking up the continuity of ladder fuels and large areas filled with contiguous shrubs that can readily transmit fire.



## **FIRE SAFE COUNCILS**

Fire Safe Councils were developed with the mission to preserve California's natural and manmade resources by enlisting all Californians to make their homes, neighborhoods, and communities fire safe. Siskiyou County is fortunate to have many active Fire Safe Councils. The Siskiyou Unit is very appreciative of the tremendous efforts these Fire Safe Councils have made in attempting to make Siskiyou County fire safe. Fire Safe Councils are predominantly volunteer based organizations and are continually looking for new community members to join in their efforts. Fire Safe Councils in Siskiyou County are identified in the Battalion Program section of this plan.

## **SISKIYOU PRESCRIBED BURN ASSOCIATION (SPBA)**

The Siskiyou Prescribed Burn Association includes landowners, tribes, and local organizations and agencies that work together to safely conduct burns in the interest of restoring historic roles of fire, using fire as a management tool, and reducing wildfire hazard to communities and watersheds throughout the diverse fire-adapted landscapes of Siskiyou County.

## **SISKIYOU COUNTY FUELS REDUCTION AND FOREST MANAGEMENT PLANNING TOOL**

The Siskiyou County Fuels Reduction and Forest Management Planning Tool is a Grant funded online GIS planning tool that is in development for collaborative county-wide pre fire planning and mapping. The planning tool will allow a common operating picture between agencies and stakeholders to reduce duplication of effort and allow for more efficient fuel reduction planning. It will also give local entities the ability to create and edit their own GIS data to produce maps and info for future funding opportunities. The Shasta Valley Resource Conservation District is the lead agency working closely with CAL FIRE Siskiyou Unit.

## INFORMATION AND EDUCATION



Information and education are an extremely important component of the Siskiyou Unit. Each year the Unit participates and promotes many Fire Safety Education Programs throughout the County.

One of Siskiyou Units most successful Fire Safety Education Programs is the Fire PALS program. The Fire PALS program uses comedy and characterization to teach children about fire prevention and life safety at home and in the forest. In addition to Fire Pals, Smokey Bear and Sparky the Fire dog are commonly called to service to introduce and instill fire prevention and life safety messages in both children and adults. Our fire prevention messages are presented to the public by the Siskiyou Unit participating in numerous outreaches each year which include exhibits at the Siskiyou County Fair and Sportsmen's Expo, poster contests, living with fire flyers, prevention road signs, rodeos, parades, classrooms, printed materials, radio, television spots, community meetings, Fire Safe Councils, one-on-one contact with homeowners and up-keeping of the Units web page, Facebook page, and Twitter account. Our educational programs are informative and are provided to all ages.

Siskiyou Unit has a dedicated Volunteer in Prevention (VIP) Program that utilizes the citizens of our community who graciously volunteer their time to increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires. VIPs assist in accomplishing these goals by conducting defensible space inspections required by Public Resource Code 4291. VIPs in the Siskiyou Unit educate thousands of people of all ages about fire prevention by participating in events and outreaches throughout Siskiyou County and other counties of California as well. Within the Siskiyou Unit, VIPs have also been trained to be fire lookouts, to inspect power lines, and to educate homeowners on how to keep their home fire safe. Furthermore, VIPs are trained to assist CAL FIRE's efforts in providing information to the media and public during wildland fires and other emergencies.

## B. VEGETATION MANAGEMENT

The Siskiyou Unit Resource Management staff administers numerous programs which support the California Strategic Fire Plan.

### ***Fuels Modification***

Forest Practice – Siskiyou Unit Resource Management staff is responsible to enforce the California Forest Practice Act and Forest Practice Rules for timber operations on private timberlands. This enforcement starts with the review of the initial project and continues through the harvesting of timber to completion. During the review of commercial timber harvesting plans, Unit staff has opportunities to provide written recommendations to project proponents designed to facilitate a positive change in the methods in which timber operations are conducted. We continually look for ways to improve forest health, fire safety, hazard reduction, public safety, vehicular access, water sources, timing of operations, wildlife benefits, and other site-specific mitigating measures necessary to support the California's Strategic Fire Plan. The treatment of logging slash to reduce the overall fuel hazard must comply with the rules and regulations, which generally apply around structures and along roads.



Vegetation Management Program (VMP) - The Vegetation Management Program (VMP) is a cost-sharing program utilizing prescribed fire, and mechanical means, for addressing wildland fire fuel hazards and other resource management issues on State Responsibility Area (SRA) lands. The use of prescribed fire mimics the natural process, restores fire to its historic role in wildland ecosystems, and provides significant fire hazard reduction benefits that enhance public and firefighter safety.

VMP allows private landowners to enter a contract with CAL FIRE to use prescribed fire to accomplish a combination of fire protection and resource management goals. The Unit will support projects that fit within the Unit's priority areas and are of the most value to the citizens and resources.

California Vegetation Treatment Program (CalVTP) – The California Vegetation Treatment Program, developed by the Board of Forestry and Fire Protection, is a critical component of the state's multi-faceted strategy to address California's wildfire crisis. The CalVTP includes the use of prescribed burning, mechanical treatments, manual treatments, herbicides, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the Wildland-Urban Interface (WUI), to construct fuel breaks, and to restore healthy ecological fire regimes. The CalVTP Program Environmental Impact Report (Program EIR) provides a powerful tool to expedite the implementation of vegetation treatments to reduce wildfire risk while conserving natural resources.

California Forest Improvement Program (CFIP) – A state cost share program to assist private timberland owners in the management of their lands. Eligible practices include site preparation, reforestation, pre-commercial thinning, pruning, release, slash disposal, and land conservation projects. Funding assistance to landowners is 75%, or up to 90% for projects on lands damaged by wildfire.

Grant funded fuel treatments – These projects generally involve the construction or maintenance of fuel breaks in the Wildland-Urban interface.

Fuel Reduction Group- To streamline all phases of fuel reduction work, the Unit has created a working group to maximize efficiency in planning, prioritization, site preparation, mapping, execution, reporting and completion of fuel reduction projects. This includes, but is not limited to fuel breaks, right of way clearance, VMP, CalVTP, prescribed fire, and other fuel reduction activities.

Tree Mortality Task Force- Tree mortality threatens public safety and infrastructure, increases short-term and long-term fire danger, reduces carbon absorbed and stored, reduces wildlife habitat, and decreases revenue for timber dependent communities. As of April 2017, 850,000 acres throughout Siskiyou County have been identified as having some degree of tree mortality, with over 76,000 acres designated as having high to extreme tree mortality. In 2015, Governor Jerry Brown issued a Proclamation of a State of Emergency for tree mortality issues throughout California; and in September 2016, the Siskiyou County Board of Supervisors adopted a resolution to form a Tree Mortality Task Force to address tree mortality issues throughout the County, and provide outreach, education, and opportunities for private landowners who may have tree mortality on their private property. The current structure of the task force is made up of Siskiyou County Natural Resources, the Office of Emergency Services, the US Forest Service, and Cal Fire. The task force aims to carry out a proactive tree mortality program including federal, state, local, public, and private entities to promote and initiate processes and projects to decrease the impacts of tree mortality throughout Siskiyou County. The task force will also engage in outreach and education to provide the public and stakeholders with options to identify, remove, and dispose of trees.

### ***Environmental Review***

The California Environmental Quality Act (CEQA) requires public agencies to consider actions on projects that may directly or indirectly result in a physical change in the environment. When CAL FIRE funds, approves, permits, facilitates, or carries out a project as lead agency it is obligated to ensure that the appropriate steps are taken in complying with CEQA by preparing an environmental review. This review is conducted by a Resource Management representative in the Forester classification assigned as the Unit Environmental Coordinator. Reviews conducted by the Environmental Coordinator ensure that the statutory responsibilities of CAL FIRE are addressed in the project planning phase. Examples of CAL FIRE projects in the Unit include facility construction or repairs, maintenance, and fire hazard clearance; fuel reduction projects such as shaded fuel breaks, prescribed burns, and live fire training.

### ***Fire Suppression Repair/Post Fire Assessment***

CAL FIRE has authority to conduct fire suppression repair activities during emergency incidents on State Responsibility Areas (SRA). This authority is provided under the Public Resources Code (PRC) Sections 4675 & 4676. Fire suppression repair includes mitigating damage to resources and property caused by firefighting efforts, including but not limited to, potential erosion from dozer and hand lines, road opening and watercourse crossings. The primary objective is to mitigate, fire suppression caused damage to as close to pre-fire conditions as is reasonably possible. This is done by minimizing

sediment delivery to watercourses, mitigating slope conditions to pre-fire drainage patterns, removing fire suppression-related debris, restoring, or removing berms and barriers as necessary, repairing gates and fence lines removed for fire control access, and implementing appropriate mitigation measures (in consultation with a CAL FIRE archaeologist) to protect cultural and/or historic resource sites.

The Resource Management staff provides suppression repair duties in the Unit. Their natural resource background, training and knowledge of both fire control issues and methods of addressing complex environmental issues allows them to assess the effects of pre- and post-fire treatments to refine best practices. This overall experience, knowledge and training greatly support the California's Strategic Fire Plan. They work with landowners and other stakeholders to provide a rapid post-fire assessment of the burned area, utilizing after-action reports, to implement the most current technologies and practices. They have many private and agency cooperator contacts, and effectively utilize available resources, including CAL FIRE hand crews, to accomplish the restoration and protection activities.

### ***Forest and Range Health***

CAL FIRE's mission emphasizes the management and protection of California's natural resources. The Resource Management Program is an integral part of that responsibility. Management of overstocked timber stands is necessary to achieve the goals of restoring, enhancing, and protecting California's natural resources. Healthy forests are more productive, are more resistant to diseases that weaken trees or cause mortality, and generally are at lower risk to catastrophic wildfire. Restoring rangeland through prescribed burning of non-native noxious weeds, forbs and grasses promotes increased range health, which has environmental and socio-economic benefit.

## SECTION V: PRE- FIRE MANAGEMENT TACTICS

### DIVISION / BATTALION / PROGRAM PLANS



# **CAL FIRE**



### SISKIYOU UNIT PREVENTION BUREAU

#### Overview

The Siskiyou Unit Fire Prevention Bureau Consists of the following staffing:

- (1) Fire Prevention Battalion Chief/ Peace Officer
- (1) Fire Prevention Specialist II/ PIO
- (1) Fire Captain Specialist/ Peace Officer
- (1) Fire Captain/ Pre-Fire Engineer
- (1) Forestry Technician/ AB 38 Inspector
- (4) Forestry Aid/ Defensible Space Inspectors

The Siskiyou Unit Prevention Bureau covers approximately 1.4 million acres in Siskiyou County. Fuel types within the Unit include timber, brush, oak woodland, grasses, desert sage and juniper.

Due to the vast size of the County and the diverse landscapes contained within it, the weather in Siskiyou County can vary greatly from one location to the next. However, weather in Siskiyou County can be generally characterized as having hot, dry summers followed by cool, wet winters. Temperatures in the summer can soar above the 100-degree mark and dip below freezing in the winter. Windy conditions are consistently common in several geographical areas of the county. Historically, most of the large fires within the Unit have been wind driven. The mountain ranges and the local weather patterns support a natural mixture for severe electrical storms throughout most of the summer months. Often these storms are accompanied with strong winds and can have little to no precipitation associated with them.

Historically, lightning has been the number one cause of ignitions within the Unit with Debris Burning being the second leading cause of ignitions. While careful analysis of the debris burn incidents has concluded that most debris burns are not debris burn escapes, but rather enforcement issues (i.e., burning out of hours, burning on non-burn days). These incidents typically do not require full suppression efforts from responding firefighting resources. Often, actions taken by firefighting resources have included having the responsible person extinguish the fire. Subsequently, the responsible person was then counseled and educated on the permit

requirements of debris burning.

Ranching, recreation, and the timber industry fuel the County economy. The summer months see a large influx of tourists who take advantage of the wide range of outdoor activities in the County. Activities include hiking, fishing, hunting, mountain climbing, white water rafting, mountain biking and camping. At times, these activities result in both authorized and unauthorized fires. To reduce the total number of negligent fires, the Prevention Bureau takes the lead role in informing, educating, and enforcing forest and fire laws.

Personnel within the Bureau work seamlessly with County Government to ensure public safety building codes are enforced in commercial and residential development. The Bureau vigorously and consistently pursues prompt enforcement of all forest and fire laws and seeks, when appropriate, cost recovery for fire suppression. Bureau personnel are active members on the Siskiyou County Arson Team (SCAT) and collaborate with other law enforcement agencies as needed or requested.

Pre-Fire Engineering is another component of the Prevention Bureau. The Prevention Bureau is responsible for ensuring the Fire Plan and statistical data, are properly captured, and reviewed for pre-fire planning.

The Bureau works with each Battalion towards accomplishing goals and objectives to reduce the ignition problems throughout the Unit. Mapping in a Geographical Information Systems (GIS) environment is a large component of the Pre-Fire Engineering duties. It is imperative that the Bureau assures that all maps are complete and accurate, and the most current methodologies are being used to capture data.

The Prevention Bureau continues to provide education and information through social media platforms, school programs, out-reaches, and one-on-one contact with the public. The Bureau generates press releases and public service announcements on a regular basis, to inform and educate as many residents as possible. The Bureau actively participates in an inter-agency Fire Prevention Co-op. The cooperative is between local, state, and federal agencies and is an ongoing effort to spread fire prevention messages to the communities we serve.

The Prevention Bureau continues to use Forestry Aids and a Forestry Technician to provide defensible space inspections in the SRA, public education, post fire damage inspections (DINS) and power line inspections.

The Prevention Bureau also uses Volunteers in Prevention (VIP) to educate the public by performing clearance inspections around residences, issuing burn permits, campfire permits, power line inspections, and assisting with educational opportunities.

## **FIRE PREVENTION GOALS**

### **GOAL # 1**

#### **Reduce the total number and severity of fires throughout the Unit.**

- a. Prioritize projects, education, and community involvement in target areas based on analyzed ignition data.
- b. Reduce the total number of illegal debris burning fires through education and enforcement efforts.
- c. Work closely with state, federal, and local governments, to cooperatively reduce ignitions across jurisdictional boundaries.
- d. Actively patrol on high fire danger days and provide education on potential fire hazards, proper fire use, and fire safety.
- e. Actively patrol in areas with high ignitions and vigorously pursue prompt enforcement action of forest and fire laws when necessary.

### **GOAL # 2**

#### **Increase the total number of defensible homes within the Unit.**

- a. Educate residents on the proper care, maintenance, and benefits of a “defensible space” home.
- b. Analyze data to identify areas with large concentrations of homes that do not meet the defensible space requirements and target these areas for inspections.
- c. Provide training to Siskiyou Unit on PRC 4291 (LE-100) to use as an educational tool with any public contact.
- d. When necessary, pursue enforcement actions to gain “defensible space” compliance.
- e. Collaborate with county and local governments and Fire Safe Councils to identify and prioritize planning and fuel reduction projects that will increase a community’s defense in the event of wildfire.

### **GOAL # 3**

#### **Reduce the total number of undetermined fires within the Unit.**

- a. Provide further training and education to field personnel in proper origin and cause investigation.
- b. Analyze investigation reports from the field for accuracy and completeness.
- c. Provide direction to field personnel on proper reporting techniques.

#### **GOAL # 4**

##### **Enhance education and training for Bureau personnel.**

- a. Provide Bureau personnel with training in Juvenile Fire Setter Program.
- b. Provide Bureau personnel with training in Field Training Officer (FTO).
- c. Provide Bureau personnel with training in Public Information.
- d. Provide Bureau personnel with training in Firearms Instruction.
- e. Provide Bureau personnel with advanced training in GIS.
- f. Provide Bureau personnel with advanced training in Fire Investigation.



# **CAL FIRE**

## **Siskiyou Training Battalion**



The Siskiyou Unit Training Bureau provides on-going training, education and certification to all CAL FIRE personnel assigned to the Siskiyou Unit. The Training Bureau also provides training and education support for several local government volunteer fire departments throughout Siskiyou County. The Siskiyou Unit Training Bureau is currently State funded for one Battalion Chief.

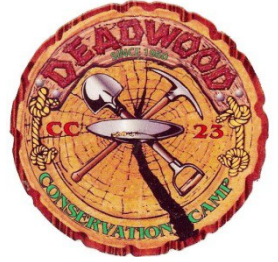
The priority of the Siskiyou Training Bureau is to provide the overall safety of permanent, seasonal, and volunteer personnel through proper training. Training is conducted through instructional programs that target operational efficiency with emphasis on safe operating procedures in all aspects of fire and emergency operations. All training is focused on providing and maintaining the highest quality emergency services at both fire and medical responses to the citizens of California. Instructional programs target operational efficiency with emphasis on safety and cost effectiveness in all aspects of fire and emergency operations. The Siskiyou Unit requires all employees to spend at least 15 percent of their time in training. This training can range from informal routine station training to formal web-based or classroom environment training. The Siskiyou Unit has implemented an on-line training program (Target Solutions) which has streamlined the delivery of emergency operational training. All training is based on defined, measurable objectives and delivered in the most effective and cost-efficient manner.

The Siskiyou Unit is heavily involved with cooperative relationships, which include involvement with the College of the Siskiyou's (COS) Fire Program and training grounds. This cooperation leads to outstanding opportunities that allow quality and cost-efficient professional training using one of the best fire training facilities on the West Coast. The Siskiyou Unit, in cooperation with the Klamath National Forest, Shasta-Trinity National Forest and many local government fire departments, conducts an annual multi-agency drill (Siskiyou County Interagency Hall Drills) each year to provide annual re-certification for wildland fire training for the Siskiyou County fire services. Local, State and Federal wildland firefighters who participate in the drill can improve their skills, as well as create cooperative working relationships in an interagency environment.



# ***CAL FIRE***

## **Deadwood Camp**



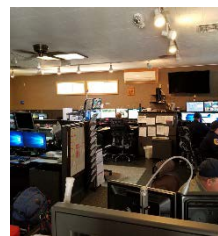
Deadwood Camp houses up to 80 inmates and is capable of staffing up to four fire-suppression hand crews. The camp is located within Siskiyou County approximately five miles from the City of Fort Jones. Opened in 1962, Deadwood is jointly operated by the California Department of Forestry and Fire Protection and the California Department of Corrections and Rehabilitation. Deadwood Camp is staffed by 1 Division Chief, 8 Fire Captains, 1 Heavy Fire Equipment Operators, 1 Heavy Equipment Mechanic and 1 Stationary Engineer. Correctional staff consists of 6 Correctional Officers, 1 Sergeant and 1 Lieutenant. The primary mission of the camp is to provide fire crews for fire suppression within the State of California. In addition to fire suppression, inmate hand crews provide a work force for flood control, conservation projects and community service.

Daily work assignments include fuel reduction projects for fire safe councils, schools, and local, state, and federal agencies. Acres treated vary by project and stakeholder needs. As recognized by the fire plan, inmate labor for fuel reduction projects provides good training for fire crews and defensible space around valuable assets and infrastructure at a reasonable cost to the taxpayer. In addition, Deadwood Camp provides opportunities for inmates to learn skills in many different aspects including kitchen work, auto repair, cabinet making and basic facility maintenance.



# ***CAL FIRE***

## **Yreka Interagency Command Center**



The Siskiyou Unit has an Emergency Command Center known as the Yreka Interagency Command Center (YICC). The YICC is located at the Siskiyou Unit Headquarters in Yreka and is a collaboration of CAL FIRE, United States Forest Service (USFS) and County of Siskiyou staff. The YICC provides dispatching services for CAL FIRE, USFS, 30 local government departments and 5 ambulance companies. The YICC is responsible for emergency call taking, dispatching, and tracking of resources. The YICC has an Emergency Dispatcher at the console 24 hours a day. The YICC has one Battalion Chief, five Fire Captains and four Communications Operators for staffing. The Klamath National Forest has one Center Manager, two Assistant Center Managers and five Dispatchers. All personnel in the YICC are Emergency Medical Dispatch (EMD) qualified to provide medical instructions to 9-1-1 callers for medical emergencies. The YICC dispatches approximately 10,000 calls per year to all EMS and Fire agencies within Siskiyou County. The YICC is also the EMS Medical Helicopter Coordination Center for Siskiyou County. It is responsible for ordering medical helicopters when requested or if a certain call type meets Auto Launch criteria as set forth by guidelines within the EMD process. The Goal of the YICC is to meet and exceed the standards set in NFPA 1221 section 6.4.2. These standards specify that 95 percent of all alarms be answered within 15 seconds and 99 percent answered within 40 seconds. In addition, Section 6.4.3 specifies that 95 percent of all dispatching be completed within 60 seconds.



# **CAL FIRE**

## **Scott Valley Battalion**



### **EXECUTIVE SUMMARY:**

The Scott Valley Battalion (Battalion 1) is located within the northwestern portion of the Siskiyou Unit. The Battalion is bordered to the east by the Siskiyou Units Shasta Valley Battalion and bordered to the north, west and south by the Klamath National Forest. The Scott Valley Battalion consists of approximately 294,463 acres of State Direct Protection Area (DPA). The majority of the State Responsibility Area (SRA) lands are in the foothills surrounding Local Responsibility Area (LRA) lands located on the valley floor and bordered by federal Responsibility Area (FRA) in the high mountainous areas. Approximately 56,000 acres of the Battalions Direct Protection Area are federal lands of the United States Forest Service and the Bureau of Land Management.

The Battalions infrastructure includes the Fort Jones Fire Station, Duzel Rock Lookout, Quartz Hill Lookout as well as numerous seasonal water tanks located throughout the Battalion for fire suppression. The Battalions assigned fire suppression equipment includes one Battalion Chief vehicle (B-2611), two front line engines (E-2665 & E-2675), one reserve engine (E-2695), as well as a transport and dozer (TD-2642). Assigned personnel include one Battalion Chief, two Fire Captains, three Fire Apparatus Engineers and two Heavy Fire Equipment Operators. During fire season staffing also includes approximately 10 to 14 seasonal firefighters. Lookouts are staffed during high fire danger or when severe lightning storms are predicted.

Within the Scott Valley Battalion, the Scott Valley Volunteer Fire Protection District, the Etna City Volunteer Fire Department, the Fort Jones Volunteer Fire Department, and the United States Forest Service (USFS) support the response to emergency incidents with Automatic and Mutual Aid Agreements. It is inevitable that despite the highly effective wildland fire protection system, some fires will continue to escape control efforts under extreme weather conditions, or when resource availability is limited due to significant fire activity. As a result, a collaboration of efforts between these resources, partnered with the communities and its members is necessary to create fire resilience.

Throughout the Battalion there are a significant number of residences within the Wildland Urban Interface (WUI). This situation creates a complex WUI problem that requires attention and mitigation strategies to reduce the threat of catastrophic wildfires. The areas of Fort Jones, Etna, Greenview, Quartz Valley, and Callahan support the most populated areas within the Battalion. State Highway 3 runs through the middle of the Battalion with moderate traffic during the daylight hours. Vegetation types within the battalion include seasonal grasses, brush, and timber. Timber makes up approximately 85% of the Battalions vegetation type. Approximately 15% of the vegetation type is comprised of large brush fields and annual grasses. Historically large fires have occurred throughout the Battalion. Continued increase of timber mortality and fuel conditions due to drought, combined with potential ignition sources have increased the possibility for large catastrophic wildfires to occur within recent years.

Decreased timber harvesting, and increased number of individuals living and recreating within the battalion also contribute to this potential. Unfortunately, this year the snowpack is below average.

Weather patterns in the Battalion throughout the spring and summer months consist of warm and dry days with a moderate to strong afternoon winds. During the nighttime hours temperatures usually drop with some relative humidity recovery. Snowpack from the surrounding mountains contribute to the areas available water and vegetation moisture content. The valleys surrounding seasonal snowpack has seen a significant reduction in recent years due to drought.

The topography of the Battalion includes portions of the lush, agricultural lands of the Scott Valley floor and extends upward into the timberland of the steep and rugged mountains. The mountain ranges and the local weather patterns support a natural mixture for severe electrical storms throughout most of the summer months. Often these storms are accompanied with strong winds and can have little to no precipitation associated with them.

The Scott Valley Battalion has several productive Fire Safe Councils (FSC). Fire Safe Councils are non-profit community led organizations that work with communities and other cooperators to increase fire resilience over the landscape. Over the past several years these Councils have evolved into a vital part of the hazard mitigation and emergency response planning within the Battalion. Collectively these Fires Safe Councils have planned and completed several million dollars' worth of fuels modification projects, reducing the fire threat in some target areas surrounding the foothills of the Scott Valley (See the attached spreadsheet of projected and completed projects within the Battalion). These projects include fuel breaks and hazardous fuels reduction along routes of ingress and egress. These Fire Safe councils include:

- Lower Scott River FSC
- French Creek FSC
- Quartz Valley Area FSC
- Rattlesnake Creek FSC
- Scott Bar FSC
- Scott Valley FSC
- Seiad Valley FSC

## **FIRE PREVENTION GOALS**

### **GOAL # 1**

#### **Reduce the total fires in the Battalion.**

- a. Advertise fire prevention messages with fire prevention signs along major roadways.
- b. Provide public training through one-on-one public contact and web-based applications.
- c. Educate the public with news releases and radio messages.
- d. Train with local fire departments and fire agencies to achieve common goals.
- e. Participate in local events for educational purposes.
- f. Increase the total number and effectiveness of defensible space inspections and promote an increasing level of compliance with defensible space laws (PRC4291).

- g. Increase the total number of power line inspections and promote increasing level of compliance with power line laws and regulations (PRC4293).
- h. Analyze trends in fire cause and focus prevention and education efforts to modify behavior and effect change

## **GOAL # 2**

### **Minimize fire size and reduce overall damage and costs associated with wildfires.**

- a. Support and assist Fire Safe Councils in identifying, obtaining, and executing strategically placed fuel reduction projects along ingress and egress routes and fuel breaks around communities that are located throughout the Battalion.
- b. Work with landowners to maintain access roads into remote fire prone areas and give direction on Defensible Space options for their infrastructure.
- c. Interact with private timberland owners, local timber operators, and resource management staff to identify active timber operations, where education can reduce the threat of fire from their operations.
- d. Support projects with the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources for fuel management activities including new projects and ongoing maintenance of existing fuels modification projects.

## **GOAL # 3**

### **Identify high hazard areas and plan for defending assets at risk.**

- a. Open and maintain existing roads that lead into high fire prone areas.
- b. Preplan with collaborators to identify primary travel routes and safe refuge areas within the Battalion.
- c. Facilitate activities with individuals and organizations, as appropriate, to assist individual property owners in complying with fire safe regulations and fuel reduction.
- d. Provide a direct community presence in high fire prone areas. Articulate and promote the concept of land use planning to homeowners and landowners, as it relates to fire risk and living within the WUI.
- e. Develop a wildland fire pre-plan for the Scott Valley Battalion

## **GOAL # 4**

### **Continue to Foster Cooperation with allied agencies.**

- a. Host and attend multi agency trainings.
- b. Attend Scott Valley Fire Chiefs and Scott Valley Consolidation meetings.
- c. Communicate with and involve allied agencies at all levels.
- d. Participate in and host cooperative fuel reduction and prescribed fire projects.

## **List of Stakeholders**

- Residents within the Battalion
- Property owners within the Battalion

- Timber Landowners
  - FWS Forestry
  - EFM
  - Michigan California
  - Shasta Cascade
- City of Etna
- City of Fort Jones
- Town of Greenvew
- Town of Callahan
- CAL-TRANS Highway 3
- Pacific Power & Light (PacifiCorp)
- Siskiyou County Road Department

#### **List of Cooperators**

- Various Fire Safe Councils
- Siskiyou Prescribed Burn Association (PBA)
- Mid Klamath Watershed Council
- Scott River Watershed Council
- Karuk Tribe
- Shasta Valley Resource Conservation District
- Fire Departments
  - Scott Valley FPD
  - Etna FD
  - Fort Jones FD
  - Happy Camp FD
  - Seiad Valley Fire Company
  - Klamath River Fire Company
  - Salmon River Fire Company
  - CAL FIRE
  - USFS Klamath National Forest

#### **Pre-Fire Management Solutions**

##### **General description of the agreed-on target areas:**

Target areas within the Scott Valley Battalion include communities and populated areas, infrastructure, and timber lands. Targeted areas include the west side of Scott Valley from Etna through Quartz Valley. The Fort Jones area from Scott River Road to Mineral Range Road. The French Creek Road area and the Community of Callahan.

##### **Key points of the local fire problem:**

The Scott Valley Battalion is an extremely large area (387,000 acres). The Battalion contains only one CAL FIRE station. Response times can be extended due to long travel times to. Inaccessible terrain also creates extended timeframes in locating and suppressing fires. The high occurrence of lightning activity and lightning caused fires can sometimes overwhelm available resources within the battalion.

##### **General description of the desired future condition:**

Continued improvement and maintenance to existing fuel breaks and fuel reduction projects to include ingress and egress is vital in protecting the battalion from catastrophic wildfires. Strategically located fuel breaks and fuel reduction work should be completed near communities, critical infrastructure, and timber lands. Prescribed fire projects should be conducted to reduce fuels and provide a fire resilient landscape. Maintenance and reclamation of access roads, water storage tanks for fire suppression, as well as placement of further storage tanks in fire prone area should continue. Staffing and maintenance of fire lookouts as well as the implementation of technological resources for early fire detection should be utilized. Public contact and fire prevention efforts should work to ensure a fire adaptive community. A fire adaptive community combined with early ignition detection within a fire resilient landscape will provide a safer fire environment for the battalion's communities, residents, cooperators, stakeholders, and first responders.

Refer to the Siskiyou Unit's Fire Plan for a detailed list of pre-fire projects within Battalion 1.



# **CAL FIRE**

## **Shasta Valley Battalion**



### **EXECUTIVE SUMMARY:**

The Shasta Valley Battalion (Battalion II) is centrally located in the northern part of Siskiyou County with the north end bordering the State of Oregon and the Scott Valley Battalion to the west and Weed Battalion to the south. The Klamath National Forest (KNF) borders the east and west with several thousand acres of State Responsibility Area (SRA) extending into the KNF DPA. The Battalion is approximately 389,049 acres designated as State DPA. It is comprised of the Siskiyou Unit Headquarters Station which houses two fire engines (E2664 & E2669) and one dozer (D2640), the Hornbrook Forest Fire Station which houses two fire engines (E2666 & E2668), and Paradise Craggy Lookout. Hornbrook Forest Fire Station is committed to year-round fire protection due to a contract with Siskiyou County as part of the Amador Plan. Both stations are open year-round for fire permit issuance and other public services. Paradise Craggy Lookout is only staffed with emergency workers during high fire danger days as well as during and after lightning storms.

Fuel types consist of grass, brush and timber that cover flat, rolling hills, and mountainous terrain. Much of the timberlands are fueled with medium to heavy slash from past logging operations. Interstate 5 and Highways 3, 96, 99, 263, as well as the Central Oregon and Pacific Railroad (CORP) railroad line run through the center of the Battalion. There are several major electrical transmission lines running north-south through the Battalion. The Battalion has a significant wildland urban interface (WUI) problem with many houses dispersed amongst the wildland areas. Due to the significant WUI problem, the lack of immediate water sources, and long travel times, much of the prevention efforts have been focused on reducing the potential for large fire losses by public education and enforcement of the California Public Resource Code Section 4291, which requires up to one hundred feet of fuel reduction/clearance around structures.

The weather patterns in the Battalion throughout the spring and summer months consist of warm and dry days with moderate to strong afternoon winds. The Shasta Valley is very prone to steady strong north winds in the summer and very strong south wind in the winter months. During the nighttime hours, the temperature usually drops with some relative humidity recovery.

Although the wildland fire statistics do not display fires on local response area (LRA) land, in past years LRA has hosted many of the Battalion's largest fires that have threatened to burn state responsibility areas (SRA). Many of these fires were found to have the same causes as the SRA fires.

The Siskiyou Unit is active in local community outreach programs, such as food / toy drives, school programs, Fire Prevention Week programs and public safety messages. Several fire

prevention signs are displayed throughout the battalion along major roadways in support of these programs.

Existing Prevention Sign Locations:

- Copco Road near railroad tracks.
- Ager-Beswick Road at Omega Road.
- Ager Road at Yreka-Ager Road.
- Old Hwy. 99 south of Yreka near South Yreka F.D. (Also visible from Interstate 5)
- Hwy. A-12 east of Grenada.
- Hwy. 263 north of Yreka

## **FIRE PREVENTION GOALS**

### **Goal #1**

**Reduce the total number of fires in the Battalion.**

- a. Advertise fire prevention messages with fire prevention signs along major roadways.
- b. Educate children utilizing school programs.
- c. Public education through public participation in local events and fire safe councils.
- d. Public education through news releases.
- e. Public education during burn permits issuance on proper and legal burning techniques.

### **Goal # 2**

**Reduce the impact of large, damaging fires in the Battalion.**

- a. Educate and enforce on proper clearances around structures, per PRC 4291.
- b. California Public Resources Code Section 4291 using the LE-100 inspection program.
- c. Support County and Battalion Fire Safe Councils.
- d. Assist with fuel reduction programs and fuel break projects.
- e. Support the California Public Resources Code Section 4290 program, which applies to new construction, to develop safer ingress and egress by establishing road and address standards, develop water supplies for emergency use, and delineate setbacks for fuel break / greenbelt development.

### **Goal # 3**

**Reduce the number of Intentionally caused fires.**

- a. Train with State and Local Fire personnel on fire scene preservation.
- b. Reduce the number of Undetermined fires.

## List of Stakeholders

- Residents within the Battalion
- Property owners within the Battalion
- Timber Owners
  - FWS Forestry
  - Timber Products
- U.S. Forest Service, Klamath National Forest
- BLM Medford
- BLM Redding
- County of Siskiyou
- CAL-TRANS: Highways 3,96,263, and Interstate 5
- Pacific Power & Light (PacifiCorp)
- Central Oregon and Pacific Railroad (CORP)
- Fire Safe Councils
  - Fire Safe Council of Siskiyou County
  - Copco/Bogus
  - Yreka Area Fire Safe Council
    - Guys Gulch Working Group
    - Shamrock Working Group
    - Greenhorn Working Group
    - Rolling Hills Working Group
    - Hawkinsville Working Group
    - Yreka Working Group
  - Black Mountain Fire Safe Council
- Siskiyou County Fire Departments within or bordering the Shasta Valley Battalion
  - Hilt Fire Hose Company
  - Hornbrook Fire Department
  - Copco Fire Department
  - Mayten Fire Department
  - Yreka Fire Department
  - South Yreka Fire Department
  - Montague Fire Department
  - Grenada Fire Department
  - Klamath River Fire Hose Company
  - Klamath National Forest
  - Oregon Department of Forestry
- Cities and Communities within the Shasta Valley Battalion
  - City of Yreka
  - City of Montague
  - Town of Grenada
  - Town of Hornbrook
  - Community of Klamath River Country Estates
  - Community of Copco
  - Community of Klamath River
  - Community of Big Springs
  - Community of Little Shasta
  - Community of Hilt
  - Community of Colestine

## **Pre-Fire Management Solutions**

General description of the agreed-on target areas:

Target areas within the Shasta Valley Battalion include all populated areas and communities, critical infrastructure, and natural resource assets at risk. Identifying and treating target areas should be a collaborative effort between stakeholders and cooperators to maximize effectiveness and efficiency.

### **Key points of the local fire problem:**

The Shasta Valley Battalion covers a large area (484,018 acres) with only 2 CAL FIRE Stations. Response times can be extended due to long travel times to incidents. Inaccessible terrain also creates extended timeframes in locating and extinguishing ignitions. Receptive fuels, local weather patterns and major highways running through the Battalion contribute to the potential for a high frequency of fires along with rapid fire growth. The high occurrence of lightning activity and lightning caused fires can sometimes overwhelm available resources within the battalion.

### **General description of the desired future condition:**

The future desired condition for the Shasta Valley Battalion is to reduce the total number and size of fires within the Battalion by creating a fire resilient landscape through pre-fire planning, pre-fire engineering, fire prevention information and fuel reduction work in addition to maintaining early detection and aggressive initial attack.

To accomplish this the Battalion will continue educating the public through fire prevention messages via signs, school programs, news releases, meetings and local events while maintaining a positive presence within the community using these programs.

Pre-fire planning and engineering will include developing pre-plans, completing defensible space inspections, conducting damage inspections post fire, issuing burn permits, and ensuring compliance with burning regulations.

Fuel reduction efforts will seek to improve and maintain existing fuel breaks concentrating on areas that provide ingress and egress into and around communities. Also, fuel breaks that are strategically advantageous for fire suppression and are close to communities and residences. Treatments will be geared towards modifying and connecting fuel breaks to completely envelope these areas.

Work will continue towards maintaining and reclaiming forest access roads to areas that are prone to high lightning activity with a focus on clearing and repairing roads and water crossings. Continue to assess the need for water sources in areas of the Battalion where water is scarce. Maintenance and staffing of lookouts should continue to be a focus to aid in early fire detection.

Refer to the Siskiyou Unit's Fire Plan for a detailed list of pre-fire projects within Shasta Valley Battalion.



# **CAL FIRE**

## **BUTTE VALLEY/ WEED BATTALION**



### **EXECUTIVE SUMMARY:**

The Butte Valley-Weed Battalion (Battalion III) includes the southern end of Shasta Valley, most of Butte Valley, and has about 333,494 acres of State DPA. The Battalion has two state fire stations. The staffing for the Battalion is as follows: One Battalion Chief (Battalion 2613), *Weed Station*: Two permanent Fire Captains and four permanent Fire Apparatus Engineers. Approximately 10 to 14 seasonal firefighters complete the peak summer staffing. The Fire Apparatus assigned to Weed Station are Engine 2663 (Model # 34) and Engine 2677 (Model # 34). *Macdoel Station*: Staffed during fire season with two permanent Fire Captains and one Limited Term Relief Fire Captain. Approximately five to nine seasonal firefighters complete the station summer staffing. The Fire Apparatus assigned to Macdoel station is Engine 2660 (Model # 34).

There are approximately 364,000 acres of Direct Protection Area in the Battalion. The fuel types include timber, juniper, desert sage and grassland. Most areas are arid with minimal surface water available for firefighting. There are many areas with poor access due to volcanic geographic features. Most of the vegetation cover needs windy and dry conditions to burn intensely. The weather presents this condition many days throughout the year.

Most of the residents are in the cities of Weed, Dorris, Tulelake, and the communities of Macdoel, Gazelle, Lake Shastina, Hammond Ranch, Mount Shasta Vista Subdivision, and the Carrick Subdivision located northeast of Weed. Interstate 5 and State Highway 97 run through the Battalion with heavy traffic during most times of the day. The Union Pacific (UP) Railroad has tracks through the Weed area and through the Butte Valley. The Central Oregon and Pacific Railroad (CORP) has tracks from Weed heading North through the Shasta Valley. There are several sets of major electrical transmission lines that run north - south through the Battalion.

## **FIRE PREVENTION GOALS**

### **GOAL # 1**

#### **To reduce the total fires in the Battalion:**

- a. Advertise fire prevention messages with fire prevention signs along major roadways.
- b. LE-100 Inspections.
- c. Educate children utilizing school programs.
- d. Public education through public contact and Fire Safe Council outreach.
- e. Participation in local events.
- f. News releases.

### **GOAL # 2**

#### **Reduce the impact of a large fire in the Battalion:**

- a. LE-100 inspections.
- b. Fire Safe training to home-owner groups and other community groups.
- c. Assist with fuel reduction programs and fuel break projects.
- d. Obtain funding to perform or contract the work done for fuels projects.
- e. Support the PRC 4290 and 4291 Program.
- f. Support Fire Safe Councils.
- g. Improve and develop water storage for fire suppression.

### **GOAL # 3**

#### **Instill Fire Prevention Goals and State Regulations to local Government Fire Depts.**

- a. Jointly train and help local government fire departments.
- b. Assist in prevention and planning with local government.
- c. Assist with media handouts and information material.

### **List of Stakeholders**

- Residents within the Battalion
- Property owners within the Battalion
- Timber owners:
  - Roseburg Forest Products
  - Sierra Pacific Industry
  - FWS Forestry
  - Hearst Corporation
  - Hancock/Olympic Forests
  - Land Vest
  - Timber Products
  - U.S. Forest Service, Klamath National Forest
  - U.S. Forest Service, Shasta-Trinity National Forest
  - Bureau of Land Management
  - Michigan California Timber Company

- Siskiyou County Fire Departments  
(Auto/Mutual Aid Agreements)
  - Weed FD
  - Lake Shastina CSD
  - Gazelle FD
  - Butte Valley FD
  - Dorris FD
  - Hammond Ranch FZ
  - Mount Shasta Vista FZ
  - Pleasant Valley FZ
  - Tulelake FD
  - Tennant CSD
  - USFS (KNF and SHF)
  - CAL FIRE
  - Oregon Department of Forestry
- Cities and Communities
  - City of Weed
  - City of Dorris
  - City of Tulelake
  - College of the Siskiyou's
  - Town of Gazelle
  - Town of Macdoel
  - Town of Tennant
  - Town of Edgewood
  - Mount Shasta Vista Subdivision
  - Carrick Addition Subdivision
  - Pleasant Valley Subdivision
  - Lake Shastina CSD
  - Hammond Ranch
- Additional Cooperators
  - CAL-TRANS
  - California Department of Fish and Game
  - Pacific Power & Light (Pacific Corp)
  - Siskiyou County
  - Union Pacific Railroad (UP)
  - Lake Shastina CSD/ Rancho Hills Subdivision
  - Boyd Farms
  - Shasta Valley Farms
  - Lassen Canyon Nursery
  - Red Rock Ranch
  - Sierra Pacific Ranches
  - Rocky Mountain Elk Foundation
- Fire Safe Councils
  - Butte Valley FSC
  - Greater Lake Shastina FSC
  - Greater Weed Area FSC
  - Juniper Flat FSC
  - Hammond Ranch FSC

## **PRE-FIRE MANAGEMENT SOLUTIONS**

### **General description of the agreed-on target areas:**

Target areas within the Butte Valley/Weed Battalion include all populated areas and communities, critical infrastructure, and natural resource assets at risk. Identifying and treating target areas should be a collaborative effort between stakeholders and cooperators to maximize effectiveness and efficiency. One of the major local fire problems the Battalion is encountering is the Mount Shasta Vista Subdivision. The area that is East of Big Springs Road, West of highway 97 and North and South of County road A-12 has seen a major influx in population. It is estimated that the population in that area has increased by 10,000+ in 2021. The main issues associated with this influx are the possible increase in ignition sources, additional building issues, and un-permitted building. The Battalion will continue to provide public education in different languages to reach as many people as possible regarding fire safety. This area has caused a spike in the Battalion's responses to nuisance fires, vegetation fires, structure fires and illegal burning. The density of the population, compounded with the narrow roads, language barriers, and an inability to do LE-100 inspections for safety concerns, make this area a high priority for fire and emergency planning.

### **Key points of the local fire problem:**

Extremely large area (364,000 acres), only two CAL FIRE stations in the Battalion, inaccessible terrain and/or long travel times. High occurrence of lightning activity and lightning caused fires. Area is subject to high winds creating fast moving fires with long range spotting potential. Major highways and populated communities present the potential for a high frequency of fires with potential for rapid fire growth through wildland urban interface areas.

### **General description of the future condition:**

The future desired condition for the Butte Valley/Weed Battalion is to reduce the total number and size of fires within the Battalion by creating a fire resilient landscape through pre-fire planning, pre-fire engineering, fire prevention information and fuel reduction work in addition to maintaining early detection and aggressive initial attack.

To accomplish this the Battalion will continue educating the public through fire prevention messages via signs, school programs, news releases, meetings and local events while maintaining a positive presence within the community using these programs.

Pre-fire planning and engineering will include developing pre-plans, completing defensible space inspections, conducting damage inspections post fire, issuing burn permits, and ensuring compliance with burning regulations.

Fuel reduction efforts will seek to improve and maintain existing fuel breaks concentrating on areas that provide ingress and egress into and around communities. Also, fuel breaks that

are strategically advantageous for fire suppression and are close to communities and residences. Treatments will be geared towards modifying and connecting fuel breaks to completely envelope these areas.

Work will continue towards maintaining and reclaiming forest access roads to areas that are prone to high lightning activity with a focus on clearing and repairing roads and water crossings. Continue to assess the need for water sources in areas of the Battalion where water is scarce.

Refer to the Siskiyou Unit's Fire Plan for a detailed list of pre-fire projects within Butte Valley/Weed Battalion



# ***CAL FIRE***

## **McCloud Battalion**



### **Executive Summary:**

McCloud Battalion (Battalion IV) is in Southern Siskiyou County and parts of northern Shasta County. Total acreage for the Battalion is about 272,886 acres of State DPA. McCloud and Pondosa are the two Cal Fire Stations staffed in Battalion IV. McCloud Station provides fire protection to the SRA during non fire season with personnel from both stations. Pondosa Station is a seasonal station located on Highway 89, four miles from the old logging mill town Pondosa. During fire season both stations are equipped with two fire engines. McCloud Station operates E2662 (model #34) and E2679 (model #34) and Pondosa Station operates E2661 (model #34) and E2667 (model #34).

A Battalion Chief (B2614), four Fire Captains (FC) and eight Fire Apparatus Engineers (FAE), staff Battalion IV. During the summer months, the staffing is augmented by seasonal employees including up to twenty-two seasonal Firefighters.

The State Responsibility Area (SRA) within Battalion IV is made up of both private and federal lands, almost entirely timber. The Fire Hazard Ranking for Battalion IV is High and Very High. Wildland Urban Interface (WUI) challenges exist within Battalion IV around the communities of Dunsmuir, Mt. Shasta, and McCloud. Of concern are the rural areas on the east side of Mt. Shasta City, and in Mount Shasta Forest and Wilderness Estate subdivisions to the east of McCloud. The City of Dunsmuir which in the Sacramento River drainage along Interstate 5 is another area of major concern. Interstate 5 (I-5) and State Highway 89 (Hwy 89) are major routes that run through the Battalion with heavy traffic during most times of the day. The Union Pacific (UP) Railroad has tracks that run north and south through the town of Dunsmuir and the City of Mt. Shasta. There are several sets of major electrical transmission lines that run north and south through the east side of the battalion. Also, a major natural gas pipeline runs north and south through the eastern portion of the Battalion.

## ***Fire Prevention Goals***

### **GOAL #1**

#### **Prevent loss of life and property within the Battalion.**

- Actively seek opportunities to provide fire safety information to the public.
- Continue participation in programs that are already established.
- LE-100 inspections.
- Update maps with water sources and fuel breaks.

### **GOAL #2**

#### **Prevent human caused fires by providing homeowners and stakeholders with information about safe burning practices and current burn regulations.**

- All employees will be well versed in current burn policies.
- Collect all fire plans from timber companies, ensure employees are familiar with locations of logging operations and access.
- Public education through public contact.
- Distribute wildfire safety brochures.

### **GOAL #3**

#### **Reduce the impact of large fires in the Battalion.**

- Assist and participate with fuel reduction programs and fuel break projects.
- Work with cooperators to improve access via road systems in the Battalion.
- Support and assist the Fire Safe Councils in Mt. Shasta, Dunsmuir, and McCloud.
- Will work with local, federal, and private landowners to foster training and build relationships that ensure aggressive initial attack.

### **List of Stakeholders**

- Residents
- Property Owners
- Timber Owners
  - Hancock Forest Management
  - Hearst Corporation
  - Campbell Timberland Management
  - Land Vest
  - Schrool Timberland
  - Sierra Pacific Industry
  - W.M. Beatty and Associates

- USFS Shasta Trinity National Forest
- BLM
- Cal Trans Interstate 5 and Highway 89
- Siskiyou County
- Greater McCloud Fire and Emergency Response Zone
- Mt. Shasta Forest Property Owners Association
- McCloud River Railroad
- Willow Creek Ranch
- City of Dunsmuir and the Dunsmuir Disaster Planning Advisory Committee (DPAC)
- City of Mt. Shasta
- McCloud Community Service District
- Fire Departments
  - McCloud Fire Department
  - Mt. Shasta City Fire Department
  - Mt. Shasta Fire Protection District
  - Dunsmuir Fire Department
  - Mt. Shasta Forest Volunteers
  - Solider Mountain Fire Department (Shasta County)
- Fire Safe Councils
  - McCloud Fire Safe Council
  - Mt. Shasta Area Fire Safe Council
  - Dunsmuir Fire Safe Council
  - Siskiyou County Fire Safe Council

## **Pre-Fire Management Solutions**

### **General description of the agreed-on target areas:**

Target areas within the McCloud Battalion include all populated areas and communities, critical infrastructure, and natural resource assets at risk. Identifying and treating target areas should be a collaborative effort between stakeholders and cooperators to maximize effectiveness and efficiency.

### **Key points of the local fire problem:**

The McCloud Battalion covers a large area with only 2 CAL FIRE stations with three of the larger communities in the Unit. Response times can be extended due to long travel times to incidents. Inaccessible terrain also creates extended timeframes in locating and extinguishing ignitions. Remote housing developments, major highways, major railroad, logging, and tourism in the Battalion contribute to the potential for a high frequency of fires along with rapid fire growth. The high occurrence of lightning activity and lightning caused fires can sometimes overwhelm available resources within the battalion.

### **General description of the desired future condition:**

The future desired condition for the McCloud Battalion is to reduce the total number and size of fires within the Battalion by creating a fire resilient landscape through pre-fire planning, pre-fire engineering, fire prevention information and fuel reduction work in addition to maintaining early detection and aggressive initial attack.

To accomplish this the Battalion will continue educating the public through fire prevention messages via signs, school programs, news releases, meetings and local events while maintaining a positive presence within the community using these programs. Promote the use of early notifications via various communications including the Code Red alert system and Zone Haven EVAC System throughout the battalion.

Pre-fire planning and engineering will include developing pre-plans, completing defensible space inspections, conducting damage inspections post fire, issuing burn permits, origin and cause investigation, and ensuring compliance with burning regulations.

Fuel reduction efforts will seek to improve and maintain existing fuel breaks concentrating on areas that provide ingress and egress into and around communities. Also, fuel breaks that are strategically advantageous for fire suppression and are in close to communities and residences. Treatments will be geared towards modifying and connecting fuel breaks to completely envelope these areas.

Work will continue towards maintaining and reclaiming forest access roads to areas that are prone to high lightning activity with a focus on clearing and repairing roads and water crossings. Continue to assess the need for water sources in areas of the Battalion where water is scarce. Battalion personnel will ensure two-way communication with logging companies and the railroad to ensure notifications are given and received regarding current logging operations and maintenance of the railroad right-of-way.

Refer to the Siskiyou Unit's Fire Plan for a detailed list of pre-fire projects within Shasta Valley Battalion.

## APPENDIX A: PRE- FIRE PROJECTS

Batt	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres
I	22CASKUT260009	Deadwood Defensible Space	O		Fuel Modification	101
I		Etna Fuel Break	P		Fuel Modification	100
I	04-DG-11050555	Scott River Road Shaded Fuel Break	C	2004	Fuel Modification	70
I	06-USFS-8908	Lower Scott River Access Roads SFB	NC	2006	Fuel Modification	100
I	06-DG-11050555-021	West Community Shaded Fuel Break	M	2006	Fuel Modification	69
I	06-DG-11050555-022	Sniktaw Road Shaded Fuel Break	C	2006	Fuel Modification	40
I	06-DG-11050555-021	West Community Shaded Fuel Break	C	2006	Fuel Modification	69
I	07UFS9552	Lower Scott River Access Road II	NC	2007	Fuel Modification	50
I	07-DG-11050500-017	French Creek Fuel Break Segment 1	C	2008	Fuel Modification	44
I	07-DG-11050500-025	Tyler Gulch Road Shaded Fuel Break	C	2008	Fuel Modification	57
I	21CASKUT260038	Etna High School	O		Fuel Modification	35
I	08USFS0109	Elderly & Disabled Landowner Defensible Space	C	2008	Fuel Modification	60
I	07-DG-11050500-017	French Creek Fuel Break Segment 1	C	2008	Fuel Modification	44
I	07-DG-11050500-025	Tyler Gulch Road Shaded Fuel Break	C	2008	Fuel Modification	57
	07-DG-11050500-023	Rattlesnake Creek Road Shaded Fuel Break	C	2008	Fuel Modification	52
I	07-DG-11050500-022	Old English Road Shaded Fuel Break	C	2009	Fuel Modification	51
I	09USFS-X-0075 (1417)	Dangle Lane Shaded Fuel Break	C	2010	Fuel Modification	70
I	09USFS-SFA0090 (930)	French Creek Shaded Fuel Break Seg. B, C & E	C	2010	Fuel Modification	86
I	09BLM0113 (1388)	Four Corners Community Safety Fuel Break Phases 3-4-5	C	2010	Fuel Modification	96
I	09BLM-0093 (931)	Four Corners Community Safety Fuel Break Phase 6	C	2010	Fuel Modification	151
I	09USFS-0096 (1519)	Lower Scott River Escape Route	C	2011	Fuel Modification	170
I	09USFS-X-0095 (1518)	Scott River Watershed Elderly & Disabled	C	2011	Fuel Modification	60
I	09UFS-0099 (1521)	Lower Scott River Ridgetop Fuel Break	C	2011	Fuel Modification	170
I	09UFS-0100 (1522)	Lower Scott River Road Fuel Break Maintenance	C	2011	Fuel Modification	70
I	10USFS-ES0333	French Creek Road Shaded Fuel Break	NC	2012	Fuel Modification	

Batt	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres
I	10USFS-ES0329	Big Meadows Recreation Area Hazardous Fuels Reduction	NC	2012	Fuel Modification	255
I	10USFS-ES0336	Western Scott Valley Shaded Fuel Break	NC	2012	Fuel Modification	270
I	10-DG-11050500-014	Scott Valley Multiple Municipality Wildland Fire Protection Project	A	2012	Fuel Modification	120
I	11USFS-SFA-X-0038	Old High CCC Road Shaded Fuel Break	NC	2012	Fuel Modification	177
I	11USFS-SFA0072	Scott River Watershed CWPP Completion	C	2012	Planning	
I	11-DG-11051000-017	Western Siskiyou Sustainable Fuel Break	C	2013	Fuel Modification	59
I	10CA-11051000-027	Orleans Private Property Fuels Treatment Project	C	2013	Fuel Modification	203
I	11-DG-11050500-027	Shackleford Falls Recreation Area Fuels Reduction	C	2013	Fuel Modification	
I	12-DG-11050500-018	Emergency Water Development for Callahan	C	2013	Water Development	N/A
I	GT-151-SKU-003	Soap Creek Fuel Break Maintenance	C	2013	Fuel Modification	42
I		Soap Creek Ridge South Shaded Fuel Break	C	2014	Fuel Modification	24
I	22CASKUT260035 22CASKUT260036	Scott River Ranch VMP	A	2029	Fuel Modification	1000
I	21CASKUT260037	Soap Creek Craggy FB	C	2021	Fuel Modification	25
I	20CASKUT260004	Soap Creek Ridge North Fuel Break	M	2021	Fuel Modification	43
I	18CASKUT260011	Scott Bar Mtn. Under Burn	C	2018	Fuel Modification	241
I	18CASKUT26020	Jones Beach Fuel Reduction	C	2018	Fuel Modification	24
I	19CASKUT260021	Scott River Road Fuel Reduction	C	2019	Fuel Modification	103
I	20CASKUT260024	Tennessee Ridge Fuel Reduction	C	2020	Fuel Modification	34
I	20CASKUT260022	Mill Creek Fuel Reduction	C	2019	Fuel Modification	17
I	18-FP-SKU-1201	Salmon River CWPP	A		CWPP	
I	22CASKUT260045	KNF McBaldy	A	2020	Fuel Modification	148
I		Spencer VMP	P	2032	Fuel Modification	1300
I	21CASKUT260060	Emigrant	C	2021	Fuel Modification	10
I	22CASKUT260063	KNF McAdams Ck	C	2021	Fuel Modification	65
I	22CASKUT260065	Stapleton Rx (PBA)	A	2021	Fuel Modification	5
I	20CASKUT260068	Greek	C	2019	Fuel Modification	25
I	21CASKUT260069	Taylor Rx	C	2022	Fuel Modification	8

I	20CASKUT260071	Island Rx	C	2020	Fuel Modification	66
I	22CASKUT260073	KNF Steamboat	A	2021	Fuel Modification	79
I	21CASKUT260004	Soap Creek Ridge N FB	M		Fuel Modification	30
I	22CASKUT260002	Crystal Creek PBA	A	2022	Fuel Modification	40
I	22CASKUT260051	Quartz Valley Pile Burning	A	2022	Fuel Modification	60
I	22CASKUT260007	KNF Scott Bar Mtn. Rx	O		Fuel Modification	600
I	22CASKUT260010	Whiskey PBA	P	2022	Fuel Modification	50
I		Etna Fuel Break	P	2027	Fuel Modification	200
I		Fruht PBA	P	2022	Fuel Modification	20
I		Kramer PBA	P	2022	Fuel Modification	15
II	14USFS-SFA-0075	Black Mountain, Phase III	C		Fuel Modification	50
II		Siskiyou Golden Fair	O		Public Outreach	
II	22CASKUT260019	Hornbrook Cal Trans	O		Fuel Modification	20
II	22CASKUT260030	Yreka Cal Trans	O		Fuel	191
II	22CASKUT260005	Shasta Valley Wildlife	M		Modification	150
II	09UFS0159	FSCSC Fuel Reduction 2009	C	2011	Fuel Modification	50
II	09-DG-11050500-064	Yreka Area FSC Elderly & Disabled Def. Space	C	2012	Fuel Modification	30
II	11USFS-SFA0073	Yreka Area FSC CWPP Development	C	2012	Planning	
II	11USFS-SFA-X-0086	Yreka Area Defensible Space Fuels Reduction Project	C	2012	Fuel Modification	124
II	11USFS_SFA-X-0100	Yreka Area Critical Ingress/Egress Shaded Fuel Break	C	2012	Fuel Modification	150
II	12USFS-SFA216	R Ranch Shaded Fuel Break Project	C	2013	Fuel Modification	30
II	10-DG-11050500-014	Seiad Water Source Development	C	2013	Water Development	N/A
II	03USF-0123	Black Mountain, Phase II	C	2015	Fuel Modification	50
II	13USFS-SFA-0122	Klamath River Phase II	C	2015		40
II	18CASKUT260042	Houghton Ranch	C	2018	Fuel Modification	315
II	21CASKUT260032	Baird Ranch	M		Fuel Modification	50
II	18CASKUT260035	Pine Mountain Yreka	C	2018	Fuel Modification	89
II	22CASKUT260027	Greenhorn KNF	A	2021	Fuel Modification	66
II	22CASKUT260008	White Rock Shooting Range	A		Fuel Modification	26
II	22CASKUT260058	Bogus Creek VMP	A	2029	Fuel Modification	1400

II	19CASKUT260028	Nature Conservancy	C	2019	Fuel Modification	1353
II	22CASKUT260033	BLM Humbug	A	2022	Fuel Modification	174
II	21CASKUT260007	E Yreka Oaks FR	P	2022	Fuel Modification	
II	22CASKUT260050	KNF Badger	A	2021	Fuel Modification	26
II		Newton Rx Phase 2	P	2023	Fuel Modification	40
II		Humbug VMP	P		Fuel Modification	
II		USFW Big Springs	P		Fuel Modification	
II	22CASKUT260061	Hornbrook Station	O		Fuel Modification	13
II	22CASKUT260040	Newton Broadcast	A	2021	Fuel Modification	87
II		Greater Yreka Fuel Reduction	P		Fuel Modification	605
II	22CASKUT260057 22CASKUT260077	Craggy GNA/ Craggy Contractor	A	2023	Fuel Modification	1002
II	18-FP-SKU-1141	Yreka Area Pre-Suppression Planning	A	2022	Planning	
III	21CASKUT260034	Siskiyou County Airports	O		Fuel Modification	33
III		College of the Siskiyou's	C		Fuel Modification	200
III	22CASKUT260026	Grass Lake Cal Trans	O		Fuel Modification	1330
III		Tulelake Fair	O		Public Outreach	
III	15-CA-110505000-018	Tennant Fuel Reduction Phase I	C		Fuel Modification	100
III		Tennant Fuel Reduction Phase II	C		Fuel Modification	86
III		Tennant Fuel Reduction Phase III	P		Fuel Modification	65
III	14USFS-SFA-X-0074	Butte Valley Fuel Reduction	A		Fuel Modification	50
III		Old Edgewood Road	M	2009	Fuel Modification	12
III	09USFS0102 (935)	Juniper Flat Hazardous Fuel Reduction	C	2010	Fuel Modification	50
III	10UFS-0650	4th Annual Juniper Flat Free Chipper Days	C	2010	Fuel Modification	
III	10USFSES314	Weed City Fuel Break	C	2011	Fuel Modification	50
III		Shastina Drive-S. Weed Blvd	C	2011	Fuel Modification	50
III		Columbus	C	2011	Fuel Modification	3
III	10USFS-ES0465	Hammond Ranch Community Hazardous Fuel Reduction	C	2012	Fuel Modification	50
III	10UFS-0653	Juniper Flat FSC Hazardous Fuels Reduction, Phase 2	C	2012	Fuel Modification	100
III	11USFS-SFA-X-0042	Juniper Flat Defensible Perimeter Fuel Break, Phase I	C	2012		100

III	11USFS-SFA-X-0120	Hammond Ranch Community Hazardous Fuels Reduction Project, Phase 2	C	2012	Fuel Modification	90
III	RAC2012	Siskiyou Fire Warden Brush Chipper	C	2012	Equipment	
III	RAC2011	Pleasant Valley Senior Fuel Reduction Project	C	2013	Fuel Modification	25
III		Juniper Flat Escape Route Chipper Days	C	2013	Fuel Modification	
III	13USFS-SFA-0123	South Weed Fuel Break (Weed City Fuel Break V)	C	2014	Fuel Modification	40
III		Observatory Hill Fuels Reduction	C	2014	Fuel Modification	60
III		East Weed Fuel Break Phase III Maintenance	c	2014	Fuel Modification	51
III	22CASKUT260029	Tule Lake Rx 1A	A	2021	Fuel Modification	2500
III	12-DG-11050500-011	Pleasant Valley Senior Project	C	2014	Fuel Modification	25
III	RAC2010	Pleasant Valley Water Storage	C	2015	Water Tanks	
III	13USFS-SFA-0123	West Weed Fuel Reduction	C	2015	Fuel Modification	26.8
III	RAC2010	Hammond Ranch Water Storage	P	2017	Water Tanks	
III	19CASKUT260036	Erickson	C	2018	Fuel Modification	296
III	19CASKUT260037	Mt Shasta Vista	C	2018	Fuel Modification	
III	19CASKUT260016	Modoc Gulch	C	2018	Fuel Modification	591
III	2600-2020-FPL-015	Juniper Flat Comprehensive Fuel Reduction	A	2024	Fuel Modification	2800
III	2600-2019-FPL-008	Lake Shastina Fuels Treatment (45 Day Report)	C	2019	Fuel Modification	389
III	19CASKUT260029	Mt. Hebron	C	2019	Fuel Modification	36
III	20CASKUT260044	Weed City Water Tanks	C	2019	Fuel Reduction	24
III	20CASKUT260046	Hammond Ranch	C	2020	Fuel Modification	61
III	19CASKUT260049	Big Springs RX	C	2019	Fuel Modification	5
III	19CASKUT260007	Shasta O Ranch VMP	C	2019	VMP	496
III	20CASKUT2600	Tennant	C	2020	Fuel Modification	138
III	22CASKUT260003	Butte Valley Wildlife Refuge	O		Fuel Modification	78
III	19CASKUT260015	Meiss Lake Road	P		Fuel Modification	56
III	19CASKUT260023	Big Springs Fuel Break	C	2019	Fuel Modification	116
III	22CASKUT260001	East Weed Fuel Break	P		Fuel Modification	12
III	18-FP-SKU-1024	Hammond Ranch Area Hazardous Fuel Reduction Project	A	2022	Fuel Modification	240
III	20CASKUT260002	MCWD Dwinnell	C	2020	Fuel Modification	20
III	22CASKUT260023	Rancho Chipping	A	2022	Fuel Modification	

III	22CASKUT260053	Lower Klamath Rx	A	2022	Fuel Modification	2184
III	20CASKUT260054	Bray Under-burn	C	2020	Fuel Modification	1475
III		Red Rock VMP	P		Fuel Modification	
III		Golden Gate Flat VMP	P		Fuel Modification	
III	22CASKUT260067	Butte Valley Broadcast	P		Fuel Modification	
III-IV		Interstate 5 Fuels Treatment	A	2023	Fuel Modification	480
IV	18-FP-SKU-1025	McCloud Community Perimeter Shaded Fuel Break	A		Fuel Modification	67
IV		Sacramento Headwaters Fuel Reduction (Spring Hill)	A		Fuel Modification	150
IV	22CASKUT260031	Mt Shasta Cal Trans	O		Fuel Modification	503
IV	01-BLM-0098	McCloud FMZ Phase #1	C	2003	Fuel Modification	83
IV	02-BLM0-0076	McCloud FMZ Phase #2	C	2004	Fuel Modification	32
IV	04-DG-11051400-005	McCloud FMZ Phase #3	C	2006	Fuel Modification	52
IV	05-BLM-0209	McCloud FMZ Phase #4	C	2006	Fuel Modification	43
IV	07USFS9430	McCloud FMZ Phase #4B	C	2006	Fuel Modification	24
IV	07USFS9434	Shasta Forest Interface Project 1	C	2007	Fuel	49
IV		Bascom Wood	C	2011	Fuel Modification	240
IV		South Dunsmuir Fuel Break	P	2011	Fuel Modification	20
IV	09-DG-11052912-151-	Rainbow Ridge Fuel Break Phase II	C	2011	Fuel Modification	20
IV	10USFS0379	Lake Siskiyou Phase V	C	2012	Fuel Modification	40
IV	10USFS-ES0382	Rainbow Ridge Fuel Break Phase I	C	2012	Fuel Modification	44
IV	10USFS SFA 0504	Dunsmuir Fuel Reduction Project	C	2012	Fuel Modification	56
IV		McCloud FMZ #5	C	2012	Fuel Modification	73
IV	09-D6-11052912151-SKU-002	Azalea	C	2013	Fuel Modification	40
IV	12UFS0173	SW Mt. Shasta Fuel Reduction Project, Phase II	C	2014	Fuel Modification	83
IV		Azalea Herbicide	C	2014	Maintenance	35
IV	19CASKUT260002	Thamar Shaded Fuel Break	C	2015	Fuel Modification	46
IV	13USFS-SFA-0135	NE Mt. Shasta Fuel Reduction Project, Phase III	C	2015	Fuel Modification	76
IV	13USFS-SFA-0142	Dunsmuir Fuel Reduction Connection 2013-RCD	C	2015	Fuel Modification	58
IV	19CASKUT260041	Pilgrim RX	C	2018	Fuel Modification	339

IV	18CASKUT260013	South Mt. Shasta Fuel Break	C	2018	Fuel Modification	10
IV	22CASKU260017	Pondosa Station Fuel Reduction	O		Fuel Modification	6
IV	22CASKU260017	Mt Shasta Fish Hatchery Fuel Reduction	O		Fuel Modification	31
IV	22CASKUT260047	Siskiyou County Flood	O		Fuel Modification	275
IV	19CASKUT260051	Shasta Acres	C	2019	Fuel Modification	50
IV	22CASKUT260006	Squaw Valley Fuel Break	A	2023	Fuel Modification	212
IV	22CASKUT260012	Mt Shasta Sewer Ponds	O	2022	Fuel Modification	15
IV	19CASKUT260010	So. Mt. Shasta Fuel Break Phase 2	C	2019	Fuel Modification	60
IV	22CASKUT260048	Castle Crags	A	2021	Fuel Modification	116
IV	22CASKUT260015	Azalea Fuel Break	A	2021	Fuel Modification	120
IV	20CASKUT260016	Spring Meadows	C	2020	Fuel Modification	2
IV	20CASKUT260059	Dunsmuir High School	C	2020	Fuel Modification	17
IV	22CASKUT260043	Deetz Rd.	A	2021	Fuel Modification	11
IV	20CASKUT260062	Shastice Park	O		Fuel Modification	7
IV	20CASKUT260064	SHF Elk	C	2022	Fuel Modification	3500
IV	22CASKUT260039	Siskiyou 89	C	2020	Fuel Modification	26
IV	22CASKUT260074	SHF Bike	A	2022	Fuel Modification	
IV	22CASKUT260071	Dunsmuir RGC	A	2022	Fuel Modification	20
IV	22CASKUT260072	SHF Old McCloud	A	2022	Fuel Modification	15
IV	22CASKUT260004	Mt. Shasta Transfer	O		Fuel Modification	
		Hwy 89 County Line	P		Fuel Modification	
IV		Squaw Valley FB Phase 2	P		Fuel Modification	
IV		Northshore Rx	P		Fuel Modification	
IV		Cantara Wildlife Area	P		Fuel Modification	
I-IV		School and Education Programs	O		Public Outreach	
I-IV	06BLM9058	FSCSC Planning and Coordination Support	C	2008	CWPP	
I-IV	09USFS0159	Fire Safe Council of Siskiyou County Fuel Reduction	C	2011	Fuel Modification	50
I-IV	10UFS0548	FSCSC Fuel Reduction 2010	C	2012	Fuel Modification	298

**Status Guide:** A= Active, P= Planning, C= Completed, O= Ongoing, M= Maintenance, NC= Not Complete

## APPENDIX B: UNIT GOALS AND OBJECTIVES

- Identify and evaluate assets at risk while collaboratively developing and sharing common data sets.
  - Develop streamlined data collection tools within the Unit to present consistent data sets for timely analysis and reporting.
  - Collect and create updated maps and GIS data layers within the unit for ownership, assets at risk, operations, hazards, fire history, ignitions and any other pertinent data as needed.
  - Evaluate and protect against emerging threats such as climate change, insect and disease outbreaks and hazardous fuel conditions.
  - Engage with local groups (e.g., Fire Safe Councils) to prioritize assets at risk and mitigating factors.
- Support local land use planning and the development of local plans within the Unit that pertain to wildland fire protection.
  - Collaborate with local agencies to ensure current and future land use planning identifies strategies to ensure communities are fire safe.
  - Ensure compliance with fire safe regulations through all stages of land use planning.
  - Support and participate in development of local fire plans and CWPPs ensuring common goals and objectives as it relates to the Unit Fire Plan.
  - Support community-based efforts to mitigate the risks and effects of wildland fires.
- Reduce risk to lives, property and natural resources through increased fire prevention efforts.
  - Continue to grow fire prevention awareness and planning through expanded education efforts utilizing public out-reach, community events, social media and new technology as applicable.
  - Expand the number of defensible space inspections within the unit and promote an increasing level of compliance.
  - Expand educational efforts to not only include defensible space, but also fire safe building materials, structure hardening and improved building design to withstand wildland fires.
  - Investigate all wildland fires and pursue appropriate mitigating action.
  - Utilize trends in fire cause to focus fire prevention efforts.

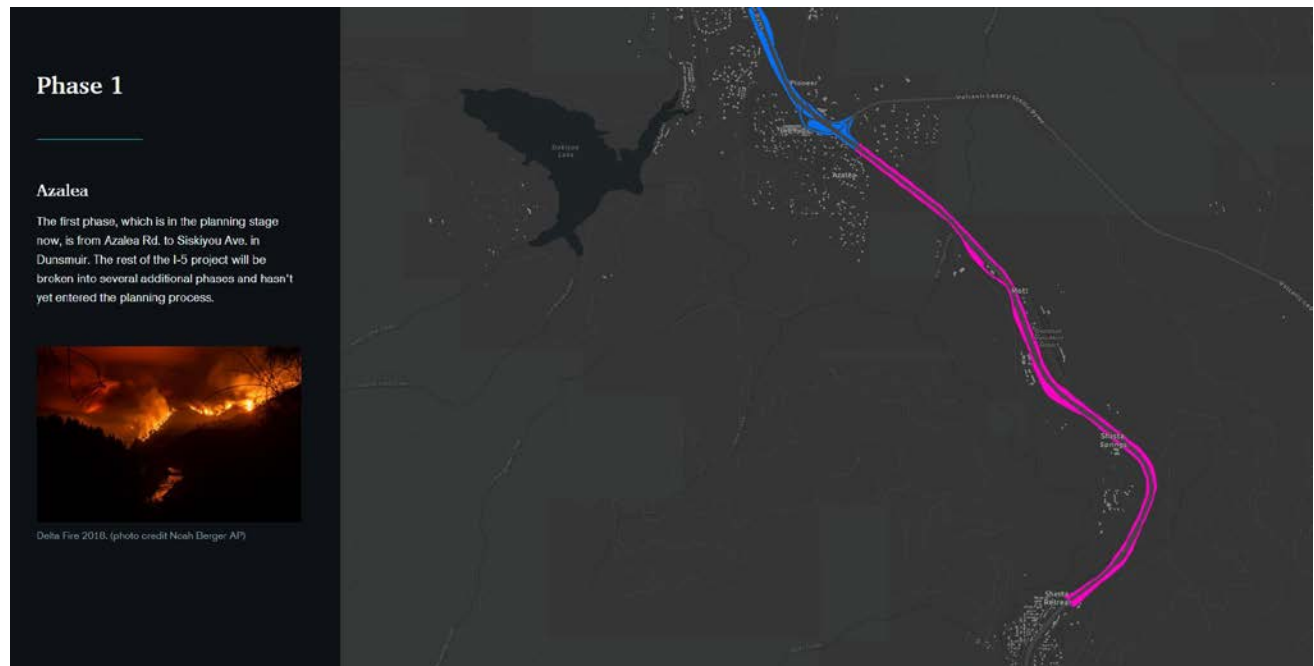
- Increase fuels reduction scope by integrating fire and fuels management practices with stakeholder priorities.
  - Support landowner-initiated fuels reduction at the unit level.
  - Ensure a collaborative approach to local fuel reduction and prescribed fire projects within the Unit by partnering with local stake holders to develop common priorities and objectives.
  - Support local partners in securing grant funding for collaboratively planned fuel reduction work within the Unit.
  - Promote the use of prescribed fire, vegetation management, grazing, forest thinning, hazardous fuels removal, sustainable commercial forest management and other fuels treatment projects.
- Identify the level of prevention and firefighting resources needed at the unit level to implement pre-fire strategies and protect assets at risk.
  - Conduct analysis based on data collected to determine effectiveness of current resources and need for additional future resources and equipment.
  - Expand efforts to enable personnel to understand and participate in pre-fire activities.
  - Maintain an aggressive initial attack policy prioritizing life, property, natural resources while considering values at risk and cost factors.
  - Ensure that personnel receive appropriate training and equipment to meet the increasingly challenging response environment safely and successfully.
  - Evaluate and implement new technologies to improve efficiency, safety, and situational awareness.
- Develop post-fire assessment strategies and tactics to protect life, property, and natural resources.
  - Implement rapid post-fire analysis, when appropriate, to determine values at risk and implement mitigation measures in a timely manner.
  - Utilize appropriate resources to accomplish restoration and protection activities.
  - Assess pre- and post-fire treatments to refine best management practices.
  - Assist stakeholders and landowners in burned areas to develop vegetation treatment plans and promote native species for restoration.

## APPENDIX C: UNIT PRIORITY PROJECTS

### Priority Projects:

For 2022 Siskiyou Unit has identified the following Priority Projects:

1. The Azalea Fuel Break (Phase 1 of Interstate 5 Fuel Reduction)
2. HWY 89 Fuel Reduction
3. Yreka Area Fuel Reduction
4. Truck Village (Phase 2 of Interstate 5 Fuel Reduction)
5. Edgewood (Phase 3 of Interstate 5 Fuel Reduction)



*Picture: Azalea Fuel Break map*

## **Appendix D: Proposed/Planned Fire Safe Council and other entity fuel reduction/planning projects supported by the Unit:**

1. **Lake Shastina CEQA Fuel Reduction-** Lake Shastina: treating 185 acres and protecting 2300 structures.
2. **Deetz-Eddy-Luginbuhl Fuel Reduction-** Mount Shasta, treating 150 acres and protecting 100 structures.
3. **Hidden Meadow Fuel Reduction-** Weed: treating 140 acres protecting 3000 structures.
4. **Eddy Drive-Hwy 89 Fuel Reduction-** Mount Shasta: treating 140 acres and protecting 2000 structures.
5. **South Old Stage-Hwy. 89 Fuel Reduction-** Mount Shasta: treating 220 acres and protecting 2000 structures.
6. **North Mount Shasta Fuel Reduction-** Mount Shasta: Treating 200 acres and protecting 500-1000 structures.
7. **South Mount Shasta Fuel Reduction-** Mount Shasta: Treating 500-1200 acres and protecting 500 structures.
8. **Highland Drive Fuel Reduction-** Mount Shasta: Treating 100 acres and protecting 100 structures.
9. **Timber Hills-Rainbow Ridge Fuel Reduction Project-** Mount Shasta: Treating 150 acres and protecting 500 structures.
10. **Boles Creek-N. Rays Fuel Reduction Project-** Weed: Treating 100 acres and protecting the town of Weed.
11. **E. Weed Fuel Reduction Project:** Treating 100 acres and protecting South Weed infrastructure
12. **Pleasant Valley Fuel Reduction,** Dorris/Butte Valley: Treating 100 acres and protecting 100 structures and the town of Dorris.
13. **Bray II Fuel Reduction-** Bray: Treating 110 acres and protecting 100 Structures.
14. **Black Mountain Fuel Reduction-** Hornbrook area: Treating 200 Acres and protecting 200 structures.
15. **Wallow Fire Fuel Reduction-** Fort Jones: Treating c.200 acres
16. **North Old Stage Road Fuel Reduction-** Mount Shasta: Treating 100 acres
17. **Black Mountain Fuel Reduction-** Hornbrook area, treating 200 acres protecting 200 structures.
18. **Klamath River Fuel Reduction-** Klamath River, treating 200 acres.

19. **Horse Creek Fuel Reduction-** Horse Creek, treating 200 acres.
20. **Westside Fuel Reduction-** Protecting Southwest side of Yreka area.
21. **Kilgore Hills Fuel Reduction-** Protecting Southeast side of Yreka area.
22. **Siskiyou Prescribed Burn Project-** Siskiyou Prescribed Burn Association planning and implementation.
23. **Lower McCloud Fuels Treatment-** South of McCloud in portions of Shasta and Siskiyou Counties, treating up to 12,000 acres protecting private timber land/private property. Multiple treatments and treatment types including prescribed fire and fuel modification.
24. **Scott Bar Mountain Fuel Reduction**
25. **Interstate 5 Fuel Treatment-** South Mt. Shasta, 50 acres.
26. **Dunsmuir Hazardous Fuel Reduction-** Dunsmuir: Treating 500 acres.
27. **Scott Valley WUI-** Scott Valley, treating up to 1500 acres
28. **Partridge Pines Community Hazardous Fuel Reduction-** Scott Valley, treating 200 acres
29. **Seiad Creek Ingress/Egress-** Seiad, treating 70 acres
30. **Siskiyou Prescribed Fire Capacity Project-** Planning and training for Prescribed Fire
31. **Dunsmuir Fuels Mitigation-** Dunsmuir, treating 334 acres
32. **Butte Valley Headwaters Fire Restoration Project-** Butte Valley, treating 549 acres and reforesting 844 acres.
33. **Abner Weed Heritage Fuels Reduction and Forest Resiliency Project-** Weed, treating 1146 acres and reforesting 555 acres.
34. **Scott Valley/ Callahan Fuels Reduction and Forest Resiliency Project-** Callahan, treating 2553 acres and reforesting 123 acres
35. **Implementing Landscape Scale Restoration/ Reforestation in Klamath National Forest** Klamath National Forest, treating 6450 acres and reforesting 450 acres
36. **Antelope Chipping/Mastication-** Butte Valley (Antelope Fire), treating 417 acres and reforesting 1028 acres

## **APPENDICES E-Z**

These Appendices are reserved for future use if necessary.

## EXHIBITS: MAPS

Figure A: Unit Map

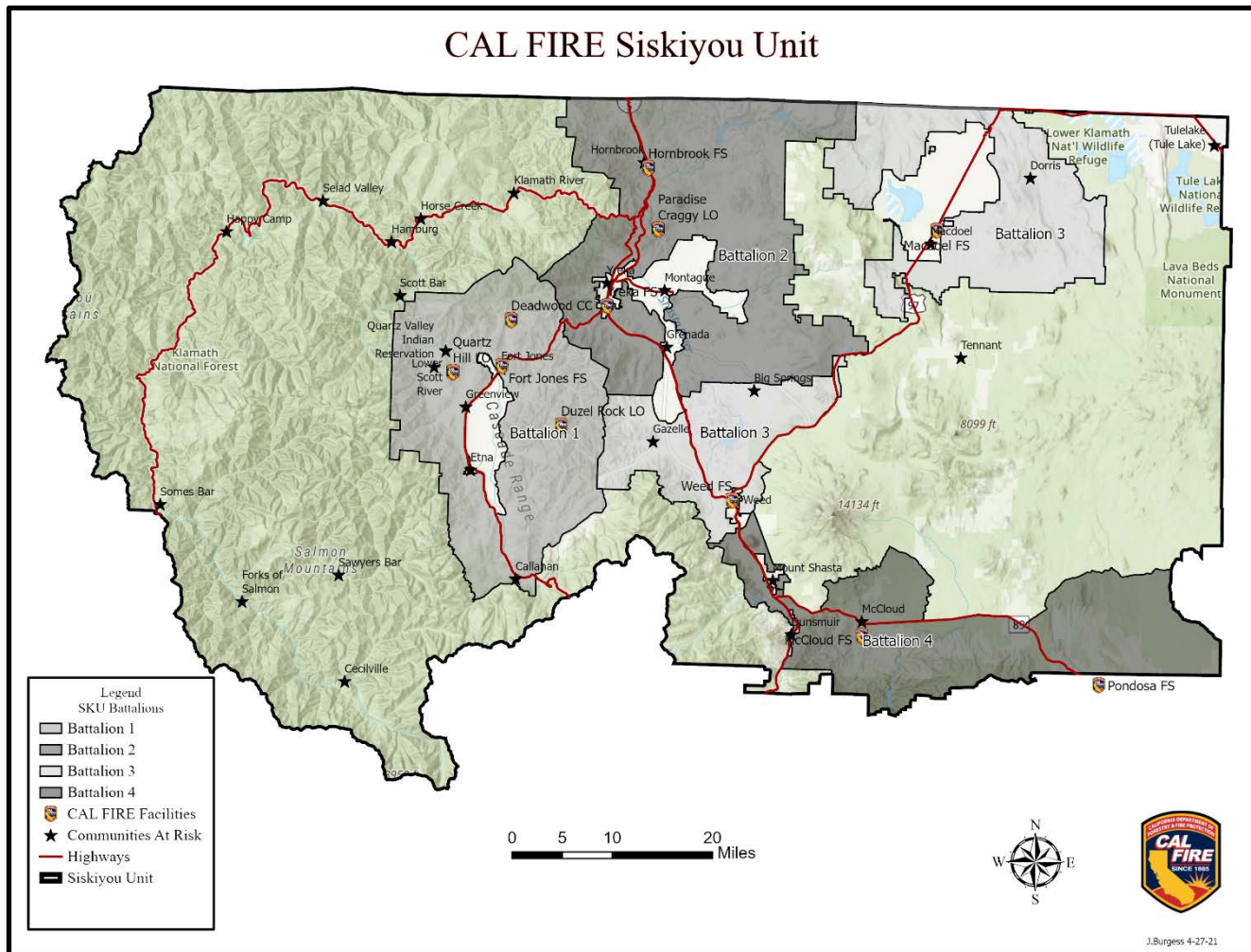


Figure B: 2020 Ignitions Map

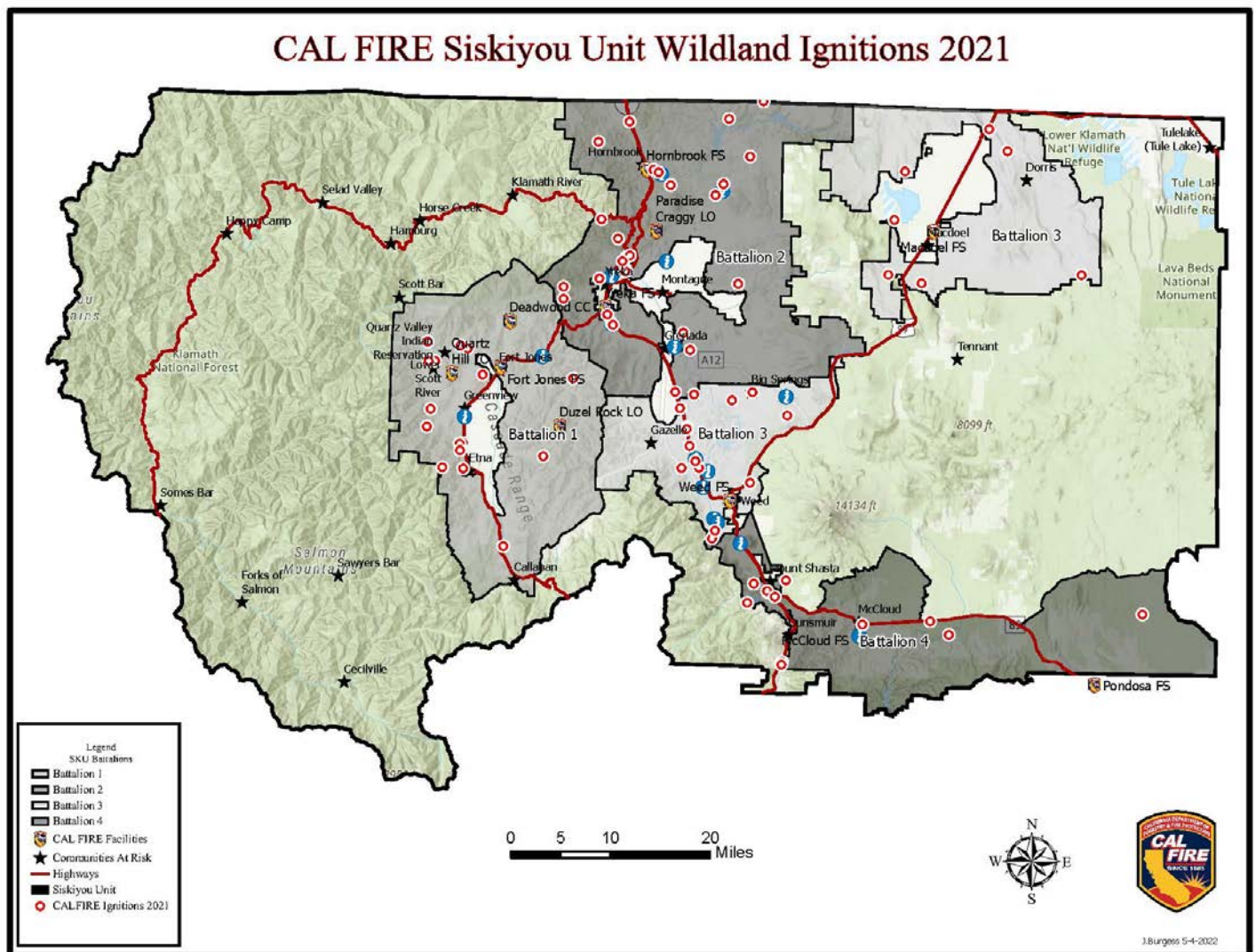


Figure C: Fire Prevention Signs



## ***ANNUAL ACCOMPLISHMENTS AND IGNITION ANALYSIS REPORTING (2017)***

The Siskiyou Unit maintained and grew relationships with all stakeholders and agencies within the Unit. In 2017, fuel reduction projects continued within the Unit that will serve to protect wildland urban interface areas (WUI) and watersheds. The California Conservation Corps (CCC) assisted the Siskiyou Unit with fuels reduction work on the Tamar Project and Soap Creek Ridge North Project. Fuel reduction projects were also completed by the Siskiyou Unit in the Hornbrook, Yreka, Scott Valley, Weed, Mount Shasta, and Butte Valley areas. Work continued the Shasta O Ranch VMP which is approximately 500 acres. Planning continues for a 1,000-acre VMP on the Scott River Ranch located in Scott Valley. Construction began on the fire suppression water tank for the Hammond Ranch Subdivision, which is expected to be completed in 2018. A second water tank is planned for the Lower Scott Valley area.

Throughout the year, fire prevention education and the FIRE PALS program were again conducted at numerous local school programs, at the Siskiyou County Fair and at other community outreaches. The Siskiyou Unit Training Bureau continued on-going training, education and certification to all CAL FIRE personnel assigned to Siskiyou Unit. The Training Bureau also assisted and participated in county-wide training drills, which focused on Mass Casualty Incidents, in conjunction with County OES, Local Volunteer Fire Departments. The Siskiyou Unit, in cooperation with the Klamath National Forest, Shasta-Trinity National Forest and many local fire departments, conducted an annual multi-agency drill (Siskiyou County Interagency Eric Hall Drills). This drill provides annual refresher training for wildland firefighting as well as other types of emergency incidents. Local, state, and federal wildland firefighters that participate improve their skills and create positive working relationships in an interagency environment.

## **Siskiyou Unit Tree Mortality**

Drought conditions in recent years have led to sporadic areas of tree mortality within the Siskiyou Unit. The tree mortality has primarily occurred on lower to mid-elevation south facing aspects in the Scott Valley, Shasta Valley, Hilt Basin and Miller Mountain areas. Mortality seems to be concentrated in transition areas exhibiting poor soil conditions where pine and other conifers are mixed with white oak and brush species. Ponderosa pine is the primary species that is being affected in these areas. Western juniper stands within the Shasta Valley and Scott Valley have also showed signs of tree mortality. White fir stands within the eastern portion of the County have also been hard hit by the drought. The drought-stricken trees have become susceptible to fir engraver bark beetle attacks. Abundant rainfall and snow that occurred throughout the unit in the 2016-2017 winter does not appear to have slowed the spread of bark beetle attacks and drought mortality.

The added fire threat posed by dead tree fuels continues to be a concern for potential rapid-fire growth. The dead trees will serve as a receptive fuel bed resulting in more ignitions from lightning and various human causes.

The Unit has identified landowner education as the primary avenue of abating the fire risks associated with tree mortality. Unit personnel continue to actively meet with landowners in affected areas and educate them with respect to their options for fuel treatments under the Forest Practice Rules and state and federal forest landowner cost share programs. Funding for these programs is increasing due to public realization that drought related tree mortality is an issue that must be addressed.

In response to the drought and associated tree mortality, the Siskiyou County Board of Supervisors has created the Siskiyou County Tree Mortality Taskforce. The Siskiyou Unit serves as collaborators on this Task Force. The objective of this Task Force is to carry out a proactive tree mortality program including federal, state, local, public and private entities to initiate projects and processes to decrease the impacts of tree mortality in Siskiyou County. The Task Force will also engage in public outreach and education, and projects and actions to provide stakeholders with options to remove and dispose of trees on private property. The Task Force will endeavor in the restoration and planning work after trees are removed from the landscape, to promote active forest management and forest health throughout the County.

The Unit has identified key locations for strategic fuel breaks and vegetation management projects in response to drought mortality. In addition, a collaborative effort will be employed to assure an aggressive suppression response. The Unit continues to work with landowners to ensure prompt access to lightning prone areas. Early detection by staffed lookouts and augmented response will aid in suppression efforts.

## 2017 Siskiyou Prevention Bureau Achievements

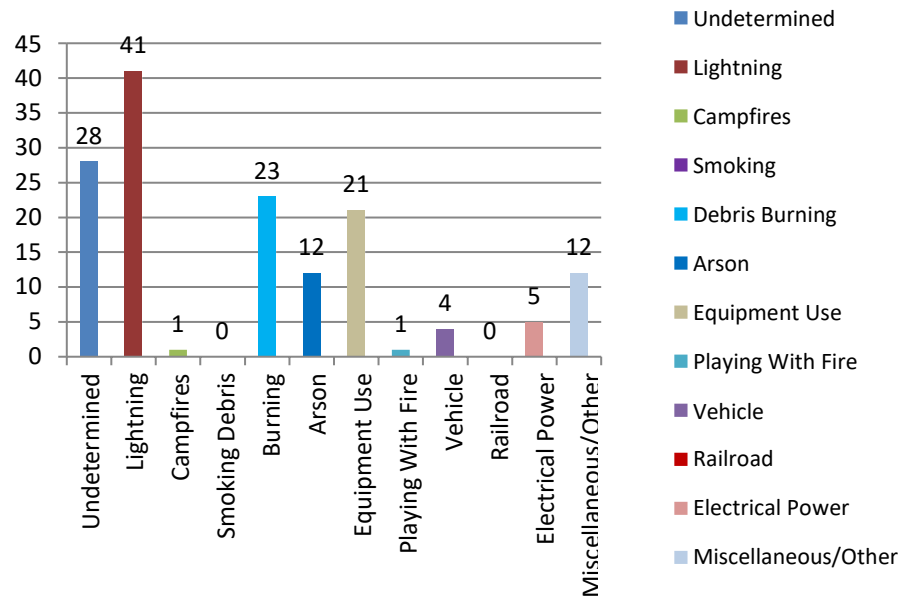
In 2017 the Siskiyou Unit investigated 213 total fires with various causes, of which 148 were vegetation fires within the state responsibility area. Lightning was the number one cause of hostile ignitions within the Unit. The ignition analysis showed that debris burn escapes were the major preventable cause of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to increase. 12 fires within the Siskiyou Unit were determined to be caused by arson. GIS mapping data was collected for 40 SRA vegetation fires within the unit.

During the year, the Prevention Bureau took the following enforcement actions: 7 custodial arrests, 31 citations, 6 District Attorney Complaints, and 12 assists to other law enforcement agencies. The bureau also processed 130 building permits and conducted 5 plan reviews. 48 LE-38 notice of fire hazard inspections were issued due to illegal burning within the Unit.

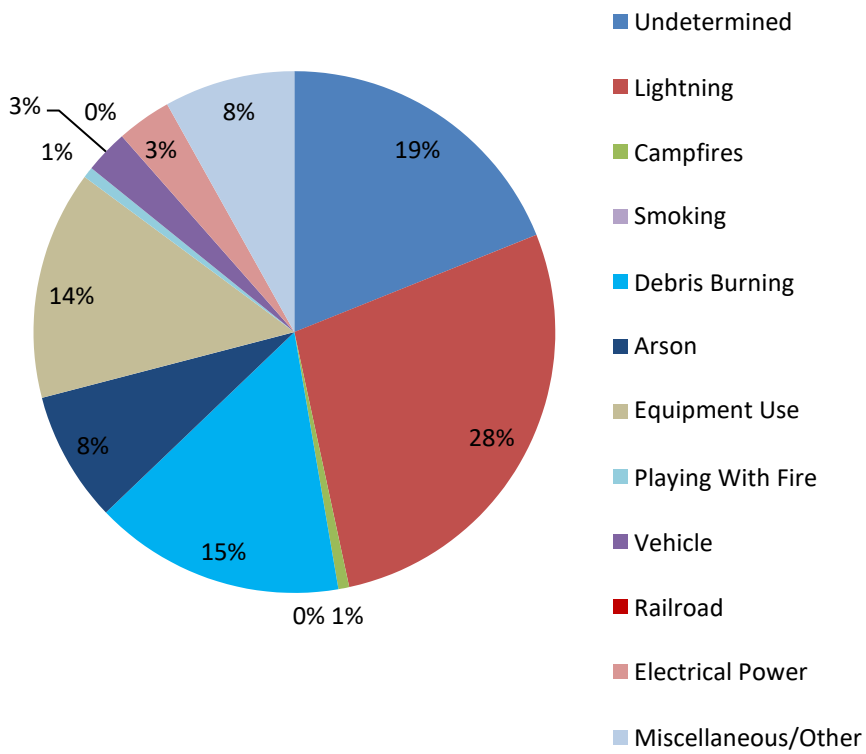
Fire prevention and education programs were conducted throughout the year. These accomplishments included: 13 fire prevention displays/presentations, over 25,000 public contacts, 6,230 contacts with students through school programs and maintenance of 19 fire prevention signs. The prevention bureau processed 2,659 defensible space inspections. Defensible space inspections totaled less than the previous year due to higher-than-normal incident activity in the unit. Unit Forestry aids were instrumental in completing these inspections, completing 1,571 of the defensible space inspections for the year. There were 167 media contacts made for fire information and/or prevention education. Numerous hours of staff time were spent with outreaches to local and federal government cooperators and fire safe councils in aiding them in fire prevention efforts.

2017 Causes	Number by Causes	Acres Burned
Undetermined	28	72.9
Lightning	41	16.63
Campfires	1	0.1
Smoking	0	0
Debris Burning	23	162.58
Arson	12	33.27
Equipment Use	21	179.61
Playing With Fire	1	0.33
Vehicle	4	0.9
Railroad	0	0
Electrical Power	5	3.92
Miscellaneous/Other	12	475.45
<b>Total:</b>	<b>148</b>	<b>945.69</b>

## 2016 Siskiyou Unit -Total Ignitions by Cause



## 2017 Siskiyou Unit Ignitons - Cause Percentages



## **Scott Valley Battalion 2017-Ignition Analysis and Achievements**

### **Achievements**

In 2017, opening fire access roads in the Battalion was a priority. Local fire activity allowed opportunities to use both fire equipment and landowner equipment to achieve this goal. The opening of these road systems now allows for access to approximately 27,000 acres that were previously closed to vehicular traffic.

The local fire activity also allowed for fuel reduction to occur along approximately 12 miles of contingency fuel breaks or roads around the town of Etna. The prescription included mostly thinning and chipping.

### **Ignition Analysis**

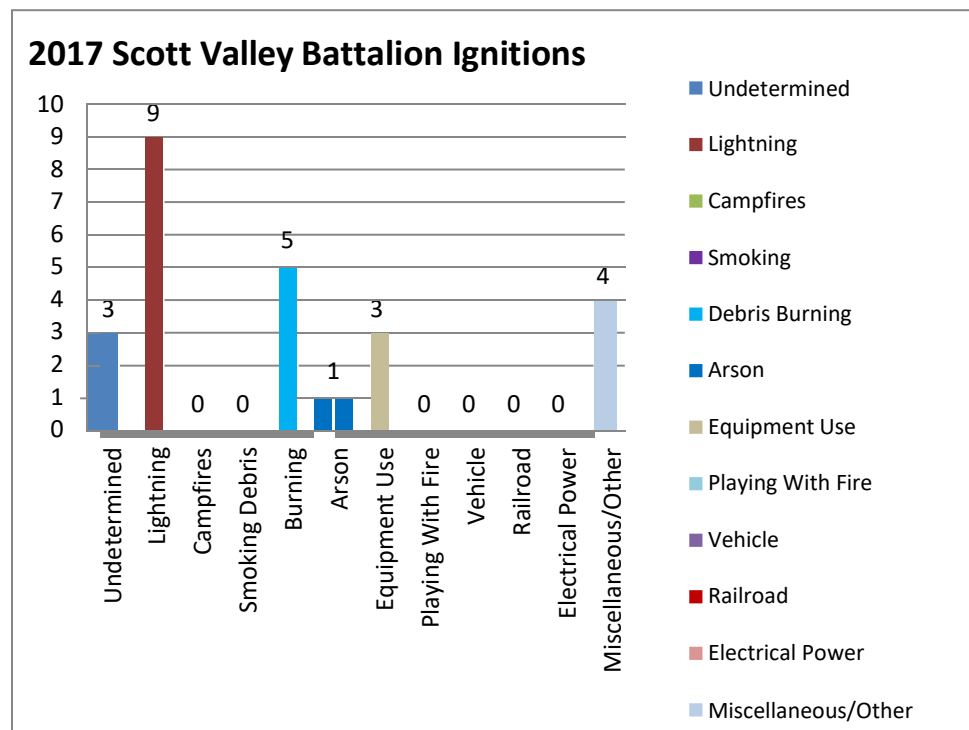
In 2017, the Scott Valley Battalion had 25 ignitions which remains consistent with previous years. Lightning ignitions continue to be the leading fire cause in the Battalion. Lightning ignitions are naturally occurring events and unavoidable. We can better prepare for lightning fires by staffing the two Battalion lookouts during times of predicted lightning weather.

Escaped debris burns was again the second leading fire cause in the Battalion. The Scott Valley Battalion had 5 fires caused by debris burn escapes. This was the same as the previous year. Additional prevention signs were ordered to assist with public education on fire safety. Fire personnel will continue to personally educate the public while issuing burn permits at the fire station, during burn pile inspections and at local events like the Etna Rodeo. The Battalion will continue to look for opportunities to work with the community on fuel breaks in and around populated areas.

The Battalion had no electrical power caused fires in 2017. The prevention and enforcement efforts from the previous year appear to have made an impact. All other fire ignitions remain within historical averages.

## 2017 SCOTT VALLEY BATTALION IGNITIONS

2017 Causes	Number by Causes	Acres Burned
Undetermined	3	2.2
Lightning	9	5.03
Campfires	0	0
Smoking	0	0
Debris Burning	5	26.9
Arson	1	15
Equipment Use	3	0.94
Playing With Fire	0	0
Vehicle	0	0
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	4	469.75
<b>Total:</b>	<b>25</b>	<b>519.82</b>



## **Shasta Valley Battalion 2017-Ignition Analysis and Achievements**

In 2017, California saw many catastrophic fires like in the previous drought-stricken years that had plagued the State. On a positive note, there were more defensible space inspections conducted in the Battalion with the addition of Defensible Space Inspectors again in 2017. Battalion personnel continued attending community outreach programs providing education through public contact and participation at local events.

The Yreka Fire Safe council continued its efforts to educate the public in the area and sought more citizen involvement along with identifying funding for additional Fire Safe projects. They also worked on a grant for Federal funding to treat fuels around the Yreka area. If the grant is awarded it will allow better access for emergency personnel, provide residents with more defensible space, and an escape route in the event of a wildfire. The Fire Safe Council hopes to utilize existing projects and tie these together with the USFS Craggy Fuel Break project. The Craggy project will provide a fuel break on Humbug and Gunsight ridges helping to protect the city of Yreka.

The Soap Creek East Fuel Break project was completed in 2017. CALFIRE and the Shasta Valley Resource Conservation District collaborated on this project and were successful with its completion.

CALFIRE partnered with TREX last year assisting with a fuel reduction and modification project on the Bogus Creek Ranch near Copco Lake. The Nature Conservancy also partnered with CALFIRE on their property in the Shasta Valley in hopes of improving range through burning approximately 1400 acres of non-native grasses and juniper.

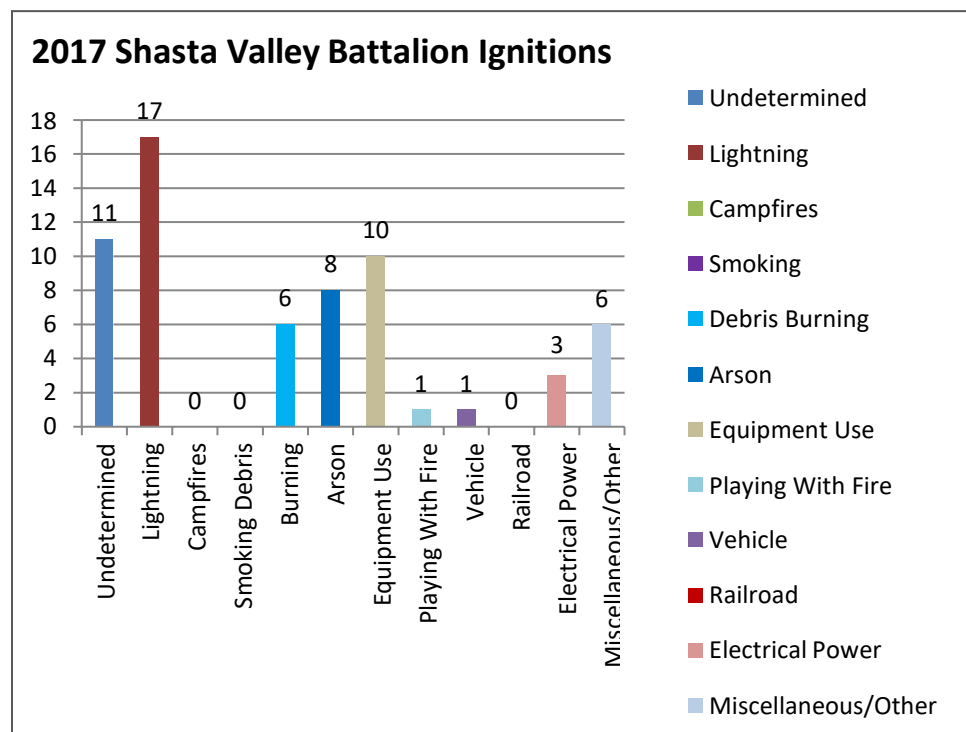
### **Ignition Analysis**

In 2017, there were a total of 63 ignitions in the Battalion which is the highest it has ever been. Contrary to the ignition total; the amount of total acreage burned was significantly lower at 163.3 acres. Contributing factors to the higher ignition totals were an increase in residents in rural areas, a more abundant grass crop, and more lightning. Siskiyou county has seen a population increase in the wildland urban interface (WUI) areas in the last two years that is attributed to marijuana production. Arson fire numbers were also up in 2017 from two to eight for the year. The CALFIRE Siskiyou Unit Prevention Bureau investigated each fire and was very successful in apprehending those responsible.

The largest fires in the Shasta Valley were the Bogus and White pine fires which were both around 50 acres each. These fires were debris burn escapes that could have been easily prevented if the responsible had been in attendance and diligent in extinguishing their burn pile. The Battalion will continue with its aggressive education and prevention plan in 2018 with the hope of increased public outreach and reducing the number of hostile fires. All other ignitions were within historical averages.

## 2017 SHASTA VALLEY BATTALION IGNITIONS

2017 Causes	Number by Causes	Acres Burned
Undetermined	11	10.41
Lightning	17	5.6
Campfires	0	0
Smoking	0	0
Debris Burning	6	105.9
Arson	8	18.07
Equipment Use	10	15.57
Playing With Fire	1	0.33
Vehicle	1	0.1
Railroad	0	0
Electrical Power	3	1.82
Miscellaneous/Other	6	5.5
<b>Total:</b>	<b>63</b>	<b>163.3</b>



## **Butte Valley/ Weed Battalion 2017-Ignition Analysis and Achievements**

In 2017, the Butte Valley/Weed Battalion received Northern Region Staff approval through efforts of the Siskiyou Unit VMP coordinator to initiate a 496-acre fuel reduction, pile burning, mechanical thinning and broadcast burn over a three-year time period on the Shasta "O" Ranch. The Shasta "O" Ranch is located just north of Weed City, but southwest of the Lake Shastina community. This VMP while challenging with adverse fuel and weather conditions has a strategic objective. The Shasta "O" Ranch property is adjacent to the Phase 1 fuel reduction project that received grant approval in 2015. The Phase 1 fuel reduction project utilized mechanical thinning to reduce and remove fuels with distances of up to 200' along Ordway Road and was completed in 2017. This project was sponsored by the Greater Lake Shastina Fire Safe Council. The combination of these two projects sharing a "common" boundary increases the overall fire protection for Lake Shastina of fire advancing from the south/southwest. In addition, it is helping to reduce the dead and down fuel load from past historical fires in the area including the Hoy fire which left thousands of dead and downed Juniper trees.

The Butte Valley Wildlife Refuge proposed a fuel reduction project regarding Juniper tree eradication. This consisted of tree felling, piling and burning. Approximately 30 acres were treated, and this is active project with the California Department of Fish and Wildlife.

The battalion staff continuously attends and/or participates in community events.

In 2017 a community pre-fire season awareness and fire safety discussion was presented to a local Hmong community using a language interpreter.

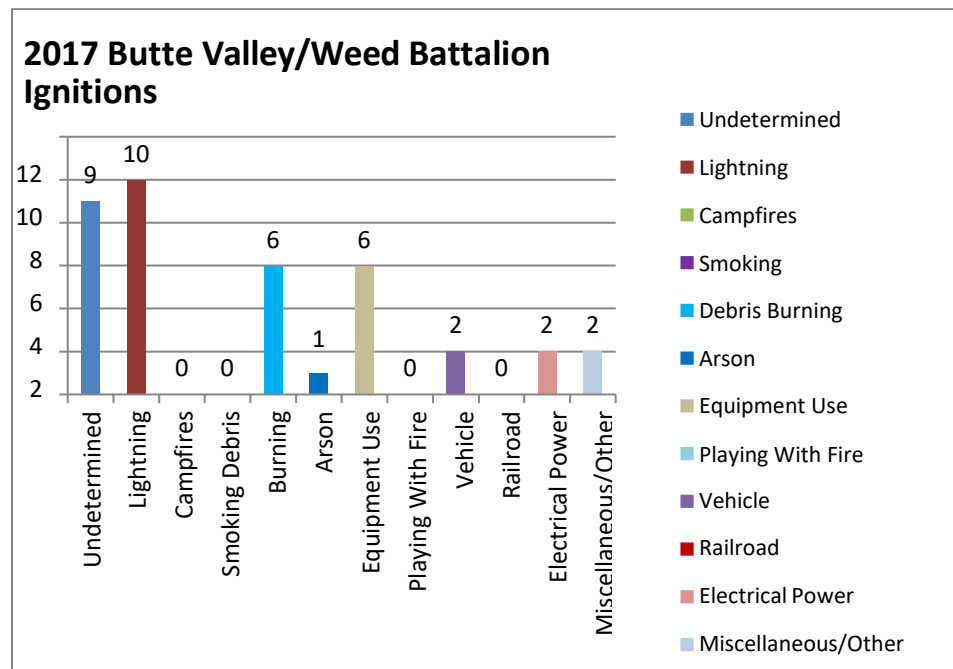
Multiple educational and fire prevention out-reach programs are instructed to the elementary schools in the battalion.

### **Ignition Analysis**

In 2017, there were 38 ignitions in the Battalion. This is compared to 26 ignitions in 2016. In 2017 the total acreage burned in the battalion was 250.82 acres. Compared to the final acres burned in 2016 being 4.07. The battalion experienced 10 lightning fires, making this the highest cause of ignitions in the battalion. In 2017, debris burning continues to contribute to unwanted fires in the battalion with 6 fires burning 28.32 acres. Equipment use was determined as the cause of 6 fires and burned 159 acres. Equipment use fires showed an increase from the previous year in 2016 and will be a focal point of fire prevention in 2018. For the second consecutive year, there were 0 fires caused by the railroad in the battalion. All other ignitions are within historical averages.

## 2017 BUTTE VALLEY BATTALION IGNITIONS

2017 Causes	Number by Causes	Acres Burned
Undetermined	9	59.5
Lightning	10	1
Campfires	0	0
Smoking	0	0
Debris Burning	6	28.32
Arson	1	0.1
Equipment Use	6	159
Playing With Fire	0	0
Vehicle	2	0.6
Railroad	0	0
Electrical Power	2	2.1
Miscellaneous/Other	2	0.2
<b>Total:</b>	<b>38</b>	<b>250.82</b>



## **McCloud Battalion 2017-Ignition Analysis and Achievements**

In 2017 many fuel break projects were completed, maintained, or initiated. Close work with area Fire Safe Councils along with continued education efforts helped to avert any large fire ignitions within the Battalion. Areas in which fuel break work was concentrated included the East side of Dunsmuir, the North, West and East side of Mt Shasta, and the Highway 89 corridor. Work continues on Spring Hill Road to Rainbow Ridge area. The number of defensible space inspections increased dramatically with an emphasis on public education contacts. Timber companies continue to maintain fuel breaks and roadways and are an asset to firefighting resources in the area. Numerous public and agency outreach events have also been used to spread the word of the importance of wildfire awareness.

### **Ignition analysis**

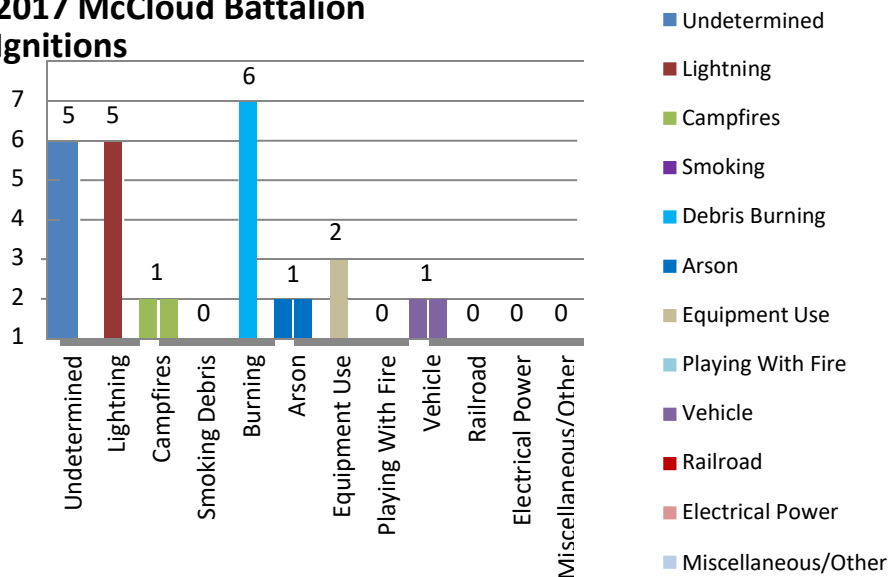
In 2017 there were a total of 21 ignitions up from 16 within the Battalion in 2016. Debris Burning was the leading cause of fire ignitions which increased 3 from the previous year. Five ignitions were caused from lightning as well as undetermined. One fire was caused by arson. The remaining ignitions fell within historical averages. Early detection and aggressive initial attack contained all fires to less than 1 acre, down from 1.5 acre the year prior.

Due to the severe drought conditions, we have experienced, which has caused areas of tree mortality to occur throughout Battalion IV, all conifers have been affected. The added threat posed by dead fuels is a concern for potential rapid-fire growth, access, and safety of personnel. Working with landowners and the public to limit the potential for ignitions along with early detection with augmented response will aid in suppression efforts.

## 2017 MCCLOUD BATTALION IGNITIONS

2017 Causes	Number by Causes	Acres Burned
Undetermined	5	0.79
Lightning	5	5
Campfires	1	0.1
Smoking	0	0
Debris Burning	6	1.46
Arson	1	0.1
Equipment Use	2	4.1
Playing With Fire	0	0
Vehicle	1	0.2
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	0	0
<b>Total:</b>	<b>21</b>	<b>11.75</b>

### 2017 McCloud Battalion Ignitions



## ***ANNUAL ACCOMPLISHMENTS REPORTING (2017)***

### **Fire Planning:**

In 2017 fuel reduction work continued to be a priority on multiple CAL FIRE and Fire Safe Council projects. These projects included Tamar, Butte Valley Fire Safe Council Fuels Reduction, Butte Valley Wildlife Refuge, Soap Creek Ridge North Fuel Break, Shasta Valley Wildlife Area, South Mount Shasta Fuel Break, Squaw Valley Fuel Break, Big Springs Fuel Break, Ordway VMP, Deadwood Defensible Space, along with many other projects. The California Conservation Corps (CCC) assisted CAL FIRE on the Tamar and Soap Creek Ridge North projects. The Siskiyou Unit continues to plan fuel reduction projects for 2018.

Construction was started on a fire suppression water storage tank for the Hammond Ranch Subdivision which is expected to be completed in 2018. A second water tank is planned for the Lower Scott Valley area.

Siskiyou Unit Personnel participated in the review and editing of various Community Wildfire Protection Plans.

The Siskiyou Unit recognizes the necessity for maintenance to be completed on multiple fuel breaks within the Unit. Maintenance grants have been challenging to obtain by Siskiyou County Fire Safe Councils. The Unit would be more fire resilient by maintaining and constructing strategically located fuel breaks rather than completing fuel breaks in non-strategic areas.

### **Investigations and Enforcement:**

In 2017 the Siskiyou Unit investigated 213 total SRA fires with various causes. 148 of the total fires were vegetation fires. The ignition analysis shows that debris burn escapes were the major preventable causes of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to steadily increase. 12 fires within the Siskiyou Unit were determined to be caused by arson.

During the year, the prevention bureau took the following enforcement actions: 7 custodial arrests, 31 citations, 6 cases filed with the District Attorney for prosecution, and 12 assists to other law enforcement agencies. The bureau also processed 130 building permits and conducted 5 plan reviews. 48 LE-38 Notice of Fire Hazard inspections were issued due to illegal burning within the Unit.

**Wildland Fire Prevention Engineering:**

The Siskiyou Unit processed a total of 130 building permit applications and conducted 5 plan reviews in 2017.

**Education and Information:**

Fire prevention and education programs were conducted throughout the year. These accomplishments included: 13 fire prevention displays/presentations, over 25,000 public contacts, 6,230 contacts with students through school programs and maintenance of 19 fire prevention signs. There were over 167 media contacts made for fire information and/ or prevention education.

**Vegetation Management:**

Fuel reduction work continues to be a priority within the Siskiyou unit. In 2017 many fuel reduction projects were completed as well as new projects planned for 2018. Fuel reduction work started on the 500-acre Vegetation Management Program (VMP) contract on the Ordway Ranch in Weed. The name of the project is the Shasta O Ranch VMP. Treatment includes a combination of hand piling and burning, tractor piling and burning and prescribed burning. Fuel Work was Planning continues for various VMP projects including a 1,000-acre VMP on the Scott River Ranch located in Scott Valley as well as numerous other fuel reduction projects throughout Siskiyou County.

**Volunteerism:**

Volunteers in Prevention put in 1,685 hours of Fire Prevention activity within the Unit. Volunteer hours were combined from Honor Guard, Lookouts, Siskiyou Golden Fair, Fire Pals, School programs and training.

**Fire Hazard Severity Mapping and Mitigation:**

No Fire Hazard Mapping was conducted in 2017. Fuel reduction projects be conducted throughout Siskiyou County continue to be considered short term mitigations for fire hazard severity.

**Other Fire Prevention Projects in SRA:**

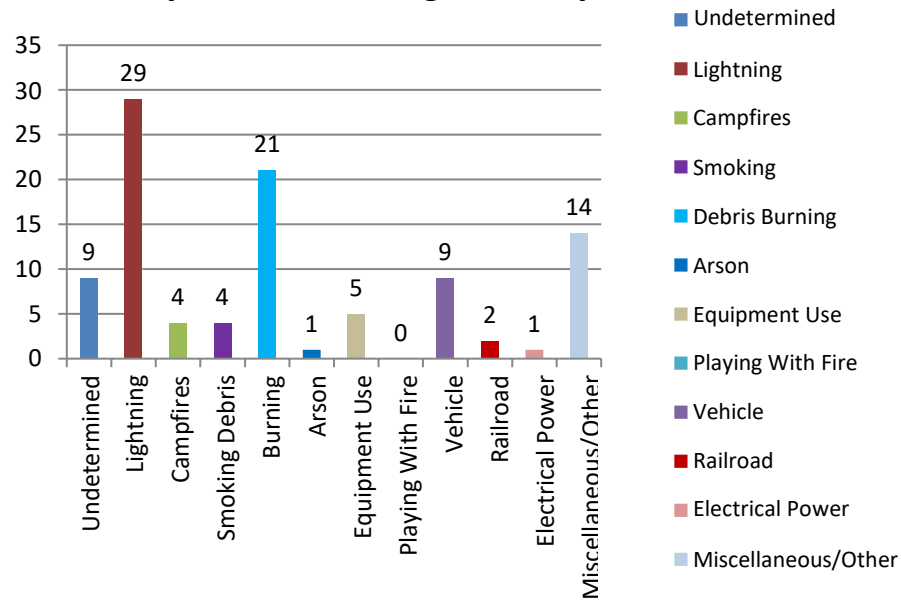
Numerous hours of staff time were spent in with Local and Federal government cooperators assisting them in combined fire prevention efforts. Staff hours were also spent aiding Fire Safe Councils in their fuel reduction and fire prevention education efforts.

## 2018 Siskiyou Unit Ignition Analysis

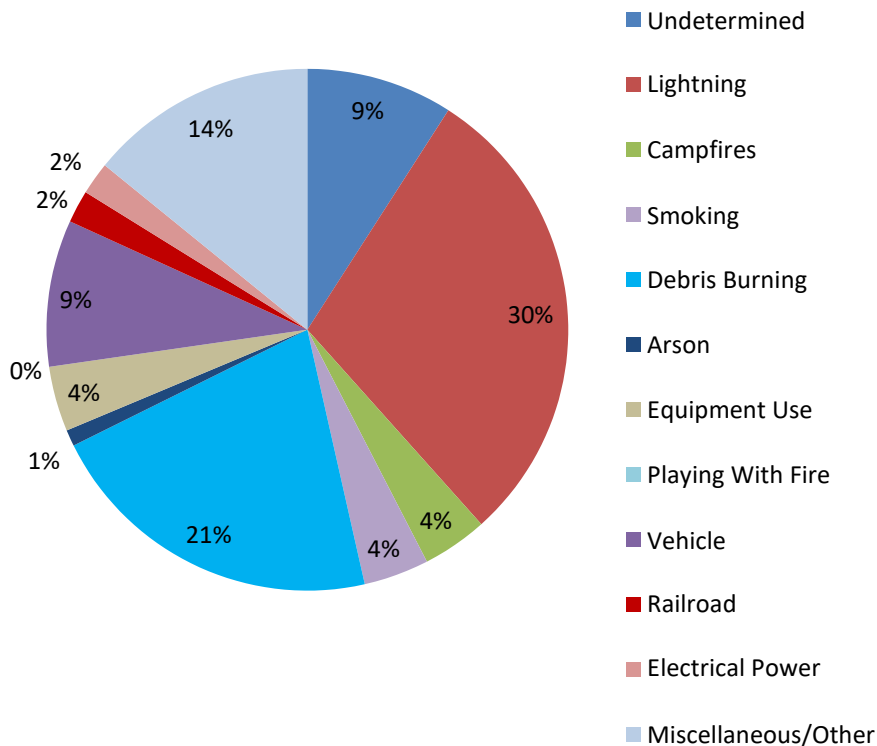
In 2018 the Siskiyou Unit investigated 150 total fires with various causes, of which 99 were vegetation fires within the state responsibility area. This was down by 53 fires from the previous year. Lightning was the number one cause of ignitions within the Unit at 29. The ignition analysis showed that debris burn escapes were the major preventable cause of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. The number of undetermined fires in the Unit was down by 19 fires, which indicates that efforts by Prevention staff to train and assist the field staff with investigations was very successful. Only one fire within the Unit was determined to be caused by arson which was down significantly from 12 last year. GIS mapping data was collected for 20 SRA vegetation fires within the unit and submitted to the Fire and Resource Assessment Program.

2018 Causes	Number by Causes	Acres Burned
Undetermined	9	22.81
Lightning	29	386.27
Campfires	4	2.34
Smoking	4	6.77
Debris Burning	21	38118.27
Arson	1	26
Equipment Use	4	8.61
Playing With Fire	0	0
Vehicle	9	1.42
Railroad	2	3.1
Electrical Power	2	0.6
Miscellaneous/Other	14	17.55
<b>Total:</b>	<b>99</b>	<b>38593.74</b>

### 2018 Siskiyou Unit - Total Ignitions by Cause



### 2018 Siskiyou Unit Ignitions - Cause



## **Scott Valley Battalion 2018 Ignition Analysis and Achievements**

### **Achievements:**

In 2018, Battalion personnel worked with The U.S. Forest Service, fire safe councils and local landowners to complete over 500 acres of fuel reduction work within the battalion. The utilization of CAL FIRE hand crews from Deadwood Camp and other CAL FIRE resources attributed to the success of these fuel treatment projects. Opening fire access roads continued to be a priority in the Battalion. Work continued through cooperation with private timber companies to open fire access roads that were previously impassable.

CAL FIRE Community Wildfire Protection Grants were submitted by the Salmon River Restoration Council for implementation of a Community Wildfire Protection Plan in the community of Salmon River. The Lower Scott River Fire Safe Council obtained grant funding to install two skid mounted water tanks for fire suppression in remote locations in the battalion and are continuing to work with landowners for their placement. The Scott River Ranch VMP Project has continued to move forward. The Unit is receiving assistance from CAL FIRE Northern Region staff in completing CEQUA documents to implement the work on this important project.

Battalion personnel continued to foster cooperative relationships with local agencies and participated in multi-agency training exercises. The battalion worked with the Fire Prevention Bureau participating in local events for public education, as well as creating public education social media posts regarding the leading causes of fires within the battalion and unit.

Total fire ignitions and burned acres were down slightly from previous years and historical averages.

### **Ignition Analysis:**

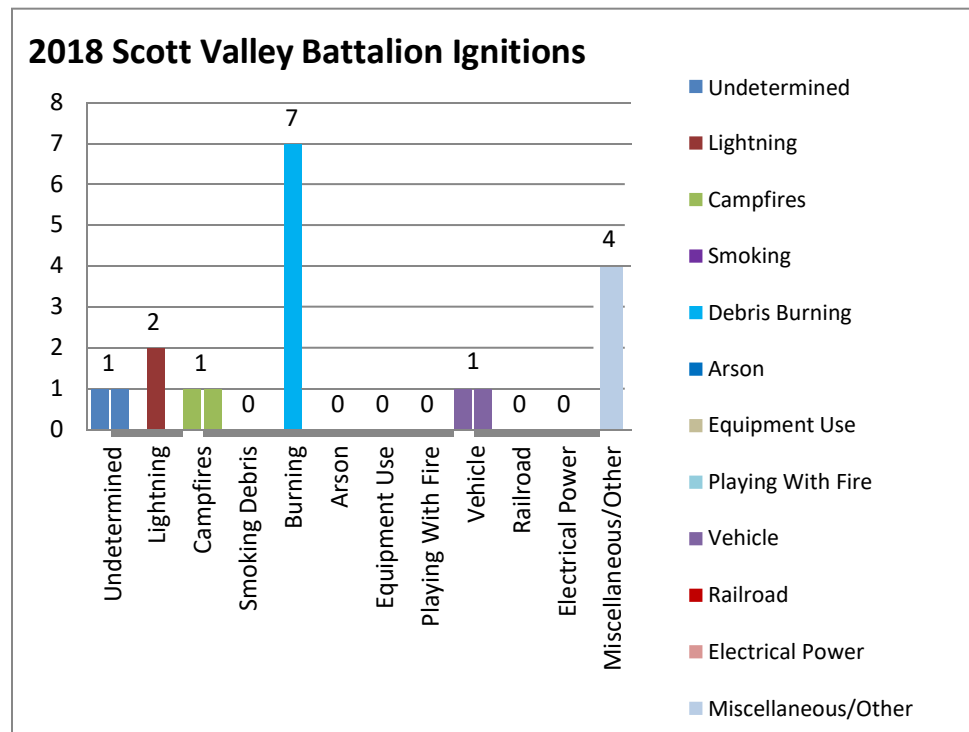
In 2018, the Scott Valley Battalion had 16 ignitions totaling 18.47 acres, which was lower than historical trends. Escaped debris burns was the leading fire cause in the Battalion. The Scott Valley Battalion had 7 fires caused by debris burn escapes and was the second leading number of acres burned. This was up slightly from last year and historical norms. Additional prevention signs were ordered as well increasing efforts in posting social media content to assist with public education regarding fire safety when burning. Fire personnel will continue to personally educate the public while issuing burn permits at the fire station, during burn pile inspections and at local events like the Etna Rodeo.

For the past two years, the Battalion has had no electrical power caused fires. The prevention education and enforcement efforts from the previous year appear to have made an impact in these ignitions. The battalion did not receive significant lightning caused fires in 2018 which contributed to the reduction in ignitions and burned acres within the battalion. All other fire ignitions remain within historical averages.

In 2018 the battalion will continue to look for opportunities to work with the community on fuel breaks in and around populated areas. The focus of these fuel breaks will be to improve ingress and egress routes for communities within the battalion. The Battalion will also continue to work to identifying locations for the implementation and completion of fuel reduction projects that will help to reduce the ignition and spread of wildland fires.

## 2018 Scott Valley Battalion Ignitions

2018 Batt I	Number by Causes	Acres Burned
Undetermined	1	0.1
Lightning	2	0.11
Campfires	1	0.13
Smoking	0	0
Debris Burning	7	5.65
Arson	0	0
Equipment Use	0	0
Playing With Fire	0	0
Vehicle	1	0.1
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	4	12.38
<b>Total:</b>	<b>16</b>	<b>18.47</b>



## **Shasta Valley Battalion 2018- Achievements and Ignition Analysis**

### **Achievements**

In 2018, the Shasta Valley Battalion's greatest accomplishment was a significant reduction in fire starts. In 2017 the Battalion recorded 62 ignitions with only 25 ignitions listed in 2018. This was over a 50% decrease in fire ignitions. Battalion personnel continued attending community outreach programs providing education through public contact and participation at local events.

The Yreka Fire Safe council continued its efforts to educate the public in the area and sought more citizen involvement along with identifying funding for additional Fire Safe projects. They also submitted a grant for State funding to analyze fire behavior in the Yreka area. The Fire Safe Council hopes to utilize existing projects and tie these together with the USFS Craggy Fuel Break project. The Craggy project will provide a fuel break on Humbug and Gunsight ridges helping to protect the city of Yreka.

CALFIRE partnered with TREX last year assisting with a fuel reduction and modification project on the Bogus Creek Ranch near Copco Lake. The Nature Conservancy also partnered with CALFIRE on their property in the Shasta Valley in hopes of improving range through burning approximately 1400 acres of non-native grasses and juniper.

### **Ignition Analysis**

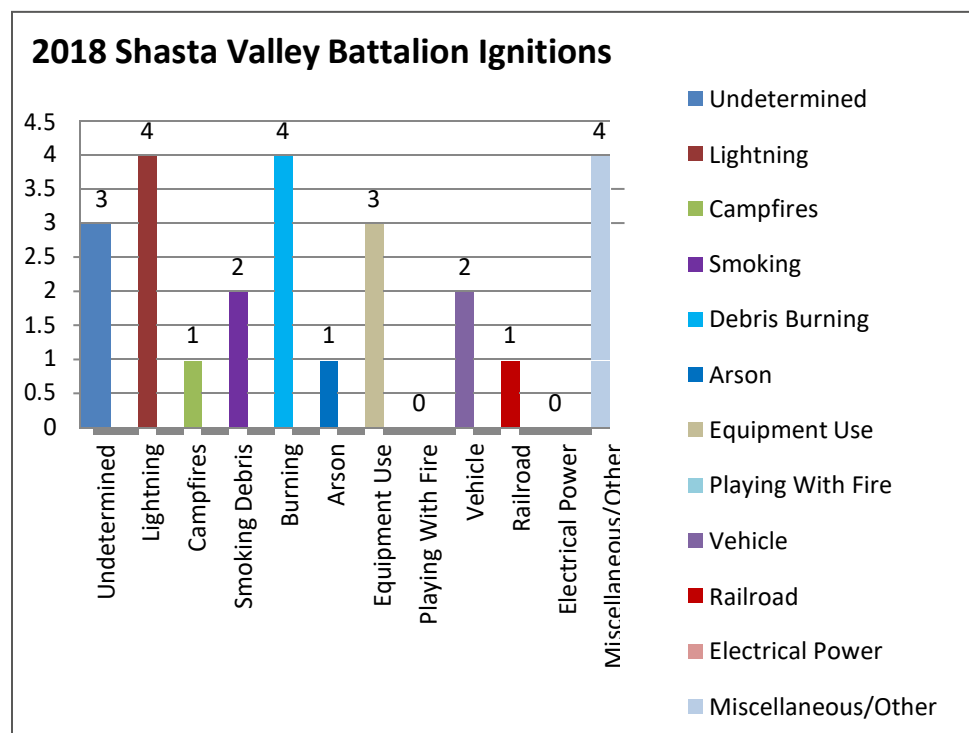
In 2018, the Shasta Valley Battalion saw a significant reduction in total ignitions. Lightning was one of the top ignition sources which was consistent with historical trends. The Battalion recorded four debris burn escapes which equaled the number of lightning fires and other miscellaneous fire causes. Debris burn escapes accounted for over 20% of the total ignitions in the battalion. The Battalion personnel will continue to educate the public through the burn permit process to ensure the burning rules are followed.

The largest fire in the Shasta Valley was the Klamathon fire. The fire grew to approximately 38,000 acres. The Klamathon fire was a wind driven fire that burned through the Hornbrook community. The fire damaged or destroyed 96 structures. The focus this year in the Battalion will be to staff lookouts and augment initial attack resources during times of predicted red flag conditions based on wind.

Large fast-moving fires are becoming more of a trend throughout the state. These fires are showing limited success by traditional fuel breaks. Therefore, the fuel breaks focus, within the Shasta Valley Battalion, will lie along routs of ingress and egress.

## 2018 Shasta Valley Battalion Ignitions

2018 Batt II	Number by Causes	Acres Burned
Undetermined	3	0.77
Lightning	4	251.49
Campfires	1	2.1
Smoking	2	6.66
Debris Burning	4	38016.4
Arson	1	26
Equipment Use	3	4.9
Playing With Fire	0	0
Vehicle	2	0.1
Railroad	1	2.9
Electrical Power	0	0
Miscellaneous/Other	4	0.84
<b>Total:</b>	<b>25</b>	<b>38312.16</b>



## **Butte Valley / Weed Battalion 2018- Ignition Analysis and Achievements**

### *Achievements*

2018 was an extraordinarily challenging year with high fire activity which impacted the ability to focus on new and continuing Battalion fuels reduction projects. Despite the local and statewide fire activity, Butte Valley / Weed Battalion continued its efforts on the 496-acre Shasta "O" Ranch Vegetation Management Program (VMP). Approved in 2017, the mechanical thinning phase has been completed and focus is now on fuel reduction through pile and broadcast burning as weather, fuels, and resource availability permit. The Shasta "O" Ranch VMP is located just north of Weed City and southwest of the Lake Shastina community and has a strategic objective to tie into Greater Lake Shastina Fire Safe Council's completed fuel reduction project along Ordway Road. The combination of these two projects sharing a common boundary increases the overall fire protection for Lake Shastina of fire advancing from the south/southwest. In addition, it is helping to reduce the dead and down fuel load from past historical fires in the area including the Hoy fire which left thousands of dead and downed Juniper trees.

The Butte Valley Wildlife Refuge proposed a fuel reduction project which was completed with broadcast burning of standing dead grass and tulles. Approximately 394 acres were burned to remove tulles which impede water fowl's access and prepare for over seeding of winter oat grass.

Battalion personnel assisted The Klamath National Forest with prescribed burns in the Tennant area as well as the Bureau of Land Management with a 591-acre prescribed burn in the Dorris / Modoc Gulch area. Participating in these prescribed burns encourages interagency cooperation, area orientation and provides valuable training and experience.

In lieu of any active grant awards, the Butte Valley / Weed Battalion continues to focus on emergency ingress and egress of at-risk communities. Weed and Macdoel station personnel continued with local chipping projects in coordination with the Juniper Flat Fire Safe Council in Mt Shasta Vista and the Hammond Ranch Fire Safe Council. The focus of the chipping projects is to improve ingress and egress of easements in subdivisions where vegetation has built up and impedes civilian evacuation and emergency responder access. The Mt Shasta Vista subdivision continues to be an area of concern for fuels reduction and civilian safety, which is at high risk due to local wind patterns, extended response times, narrow winding roads and a high concentration of non-English speaking population involved in the marijuana industry. Additional chipping projects will continue to be coordinated and evaluated within communities in the Butte Valley / Weed Battalion.

Close coordination between Butte Valley / Weed Battalion and Fire Safe Councils continued through 2018 with five very active Fire Safe Councils either applying for grants or contributing to grants to reduce fuels and improve ingress and egress. The Fire Safe Council of Siskiyou County submitted a "Siskiyou County Multi-Communities Fuels Reduction Project" grant via CAL FIRE's California Climate Investments Fire Prevention Grant Program that would include the Greater Lake Shastina area, Mt. Shasta Vista subdivision and the Hidden Meadow subdivision. Additionally, the Hammond Ranch Fire Safe Council applied for a "Hammond

Ranch Area Hazardous Fuels Reduction Program”. These grants, if awarded in 2019, encompass entire subdivisions and reduce fuels along main roads that are overgrown with vegetation and pose a threat to resident evacuation and firefighter access.

The Battalion staff continuously attends and/or participates in community events. In 2018 a community pre-fire season awareness and fire safety discussion was presented to a local Hmong community using a language interpreter.

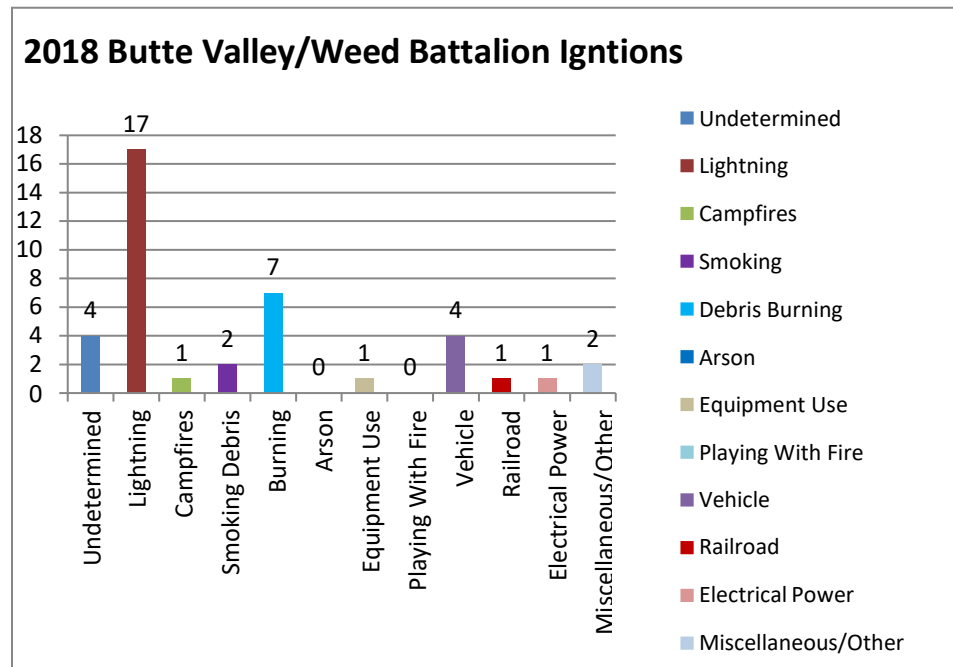
Battalion personnel continue to deliver educational and fire prevention out-reach programs to the elementary schools in the battalion.

### Ignition Analysis

In 2018, there were 40 ignitions in the Battalion, compared to 38 ignitions in 2017. In 2018 the total acreage burned in the battalion was 254.68 acres, compared to the final 250.82 acres burned in 2017. The battalion experienced 17 lightning fires, up from 10 in 2017, making lightning the highest cause of ignitions in the battalion for two years in a row. In 2018, debris burning continued to be the battalion’s second highest number of fires caused with 7 fires burning 94.62 acres. Debris burning will be the focus for fire prevention efforts for 2019. Equipment use was determined as the cause of 1 fire which burned 3.7 acres. Equipment use fires decreased dramatically from 2017 which may be a result of focused fire prevention education and widespread media coverage of large fires and fire safety. There was 1 railroad ignition in the battalion, continuing the trend of very low railroad caused ignitions. All other ignitions are within historical averages.

## 2018 Butte Valley/ Weed Battalion Ignitions

2018 Batt III	Number by Causes	Acres Burned
Undetermined	4	21.93
Lightning	17	129.17
Campfires	1	0.01
Smoking	2	0.11
Debris Burning	7	94.62
Arson	0	0
Equipment Use	1	3.7
Playing With Fire	0	0
Vehicle	4	1.14
Railroad	1	0.2
Electrical Power	1	0.6
Miscellaneous/Other	2	3.2
<b>Total:</b>	<b>40</b>	<b>254.68</b>



## **McCloud Battalion 2018-Ignition Analysis and Achievements**

### **Achievements**

2018 saw many accomplishments in the McCloud Battalion highlighted by the restarting of the McCloud and the Dunsmuir Fire Safe Councils. Fuel reduction work continued through the Fire Safe Council of Siskiyou County around the City of Mount Shasta, with fuel break projects initiated, completed, and maintained utilizing chipper days, Deadwood Crews and Engine Companies within the Battalion. Working with local Fire Safe Councils, timber companies and the United States Forest Service, through continued education efforts, helped avert any large fire ignitions within the Battalion. Fuel breaks and broadcast burning were concentrated in the areas on the east side of Dunsmuir, the North, West and East side of Mt Shasta and the Highway 89 corridor which included widening of an existing fuel break on Squaw Valley Road. Work continues at Spring Hill Road to Rainbow Ridge area. Battalion personnel and equipment also contributed to cooperator fuel reduction projects with the Shasta Trinity National Forest with the Algoma and Pilgrim projects. The number of defensible space inspections in the Battalion increased dramatically with an emphasis on public education contacts. Timber companies continue to add fuel breaks while also maintaining existing fuel breaks and roadways. These cooperators continue to be an asset to firefighting resources in the area. McCloud Battalion personnel are involved in the local Fire Safe Council and School programs in addition to outreach events designed to educate the public of the importance of wildfire awareness through various means such as the Ready, Set, Go, Code Red and defensible space program.

The McCloud Fire Safe Council submitted a grant through CAL FIRE's California Climate Investments Fire Prevention Grant Program that will establish a shaded fuel break around the town of McCloud which was awarded in 2019 for \$775,066.00.

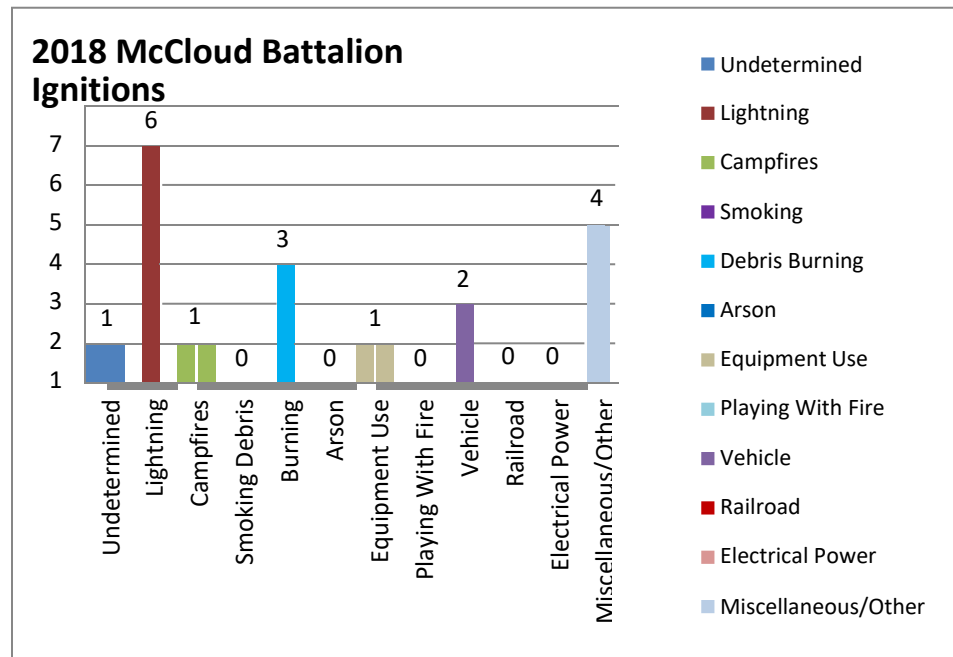
### **Ignition analysis**

In 2018 there were a total of 18 ignitions, which were down from 21 ignitions the previous year. Causes varied from abandoned campfires, lightning caused fires, illegal burns and equipment fires. The remaining ignitions fell within historical averages. Early detection and aggressive initial attack contained all fires to less than 6 acres total, up by one acre from the year prior.

Due to previous years of severe drought conditions and the Bark Beetle infestation California has experienced, tree mortality continues to expand throughout the McCloud Battalion. The added threat posed by dead fuels is a concern for potential rapid-fire growth, compromised ingress and egress for the safety of the community and emergency personnel. As this mortality continues to expand, the Siskiyou County Tree Mortality Task Force will help prioritize the growing need for fuel reduction work throughout the battalion. Working with landowners and stakeholders to limit the potential for ignitions along with early detection, augmented response and well-planned fuel reduction work will aid in suppression efforts.

## 2018 McCloud Battalion Ignitions

2018 Batt IV	Number by Causes	Acres Burned
Undetermined	1	0.01
Lightning	6	5.5
Campfires	1	0.1
Smoking	0	0
Debris Burning	3	1.6
Arson	0	0
Equipment Use	1	0.01
Playing With Fire	0	0
Vehicle	2	0.08
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	4	1.13
<b>Total:</b>	<b>18</b>	<b>8.43</b>



## ***ANNUAL ACCOMPLISHMENTS REPORTING 2018***

### **Fire Planning:**

In 2018 fuel reduction work continued to be a priority on multiple CAL FIRE and Fire Safe Council projects. These projects included Butte Valley Wildlife Refuge, Soap Creek Ridge North Fuel Break, Shasta Valley Wildlife Area, South Mount Shasta Fuel Break, Squaw Valley Fuel Break, Big Springs Fuel Break, Ordway VMP, Deadwood Defensible Space, Weed City Water Tanks, along with many other projects. The California Conservation Corps (CCC) assisted CAL FIRE on the Tamar and Soap Creek Ridge North projects. The Siskiyou Unit continues to plan fuel reduction projects for 2019.

Construction was started on a fire suppression water storage tank in 2017 for the Hammond Ranch Subdivision which was completed in 2018. A second water tank is planned for the Lower Scott Valley area.

Siskiyou Unit Personnel participated in the review and editing of various Community Wildfire Protection Plans including the Siskiyou County CWPP Update.

The Siskiyou Unit recognizes the necessity for maintenance to be completed on multiple fuel breaks within the Unit. Maintenance grants have been challenging to obtain by Siskiyou County Fire Safe Councils. The Unit would be more fire resilient by maintaining and constructing strategically located fuel breaks rather than completing fuel breaks in non-strategic areas.

### **Investigations and Enforcement:**

In 2018 the Siskiyou Unit investigated 158 total SRA fires with various causes, 99 of which were vegetation fires. The ignition analysis shows that debris burn escapes were the major preventable causes of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to steadily increase. Only one fire within the Unit was determined to be caused by arson which was down significantly from 12 last year.

During the year, the Prevention Bureau took the following enforcement actions: 3 custodial fire related arrests, 19 citations, 5 District Attorney Complaints, and 8 assists to other law enforcement agencies. 38 LE-38 notice of fire hazard inspections were issued due to illegal burning within the Unit.

### **Wildland Fire Prevention Engineering:**

The Siskiyou Unit processed a total of 142 building permit applications and conducted 27 plan reviews in 2018.

**Education and Information:**

Fire prevention and education programs were conducted throughout the year. These accomplishments included: 25 fire prevention displays/presentations, over 35,000 public contacts, 7,160 contacts with students through school programs and maintenance of 21 fire prevention signs. The prevention bureau processed 3468 defensible space inspections, an increase of 809 from the previous year. Unit Forestry aids were instrumental in completing these inspections, while also completing 3414 powerline inspections for the year. There were 167 media contacts made for fire information and/or prevention education. Numerous hours of staff time were spent with outreaches to local and federal government cooperators and fire safe councils in aiding them in fire prevention efforts.

**Vegetation Management:**

Fuel reduction work continues to be a priority within the Siskiyou unit. In 2018 many fuel reduction projects were completed as well as new projects planned for 2019. Fuel reduction work started on the 500-acre Vegetation Management Program (VMP) contract on the Ordway Ranch in Weed. Treatments include a combination of hand piling and burning, tractor piling and burning and prescribed burning. Fuel Work was Planning continues various VMP projects including a 1,000-acre VMP on the Scott River Ranch located in Scott Valley, Bogus Creek VMP and numerous other fuel reduction projects throughout Siskiyou County.

**Volunteerism:**

Volunteers in Prevention put in 2,985 hours of Fire Prevention activity within the Unit. Volunteer hours were combined from Honor Guard, Lookouts, Siskiyou Golden Fair, Fire Pals, School programs and training.

**Fire Hazard Severity Mapping and Mitigation:**

No Fire Hazard Mapping was conducted in 2018. Fuel reduction projects to be conducted throughout Siskiyou County continue to be considered short term mitigations for fire hazard severity.

**Other Fire Prevention Projects in SRA:**

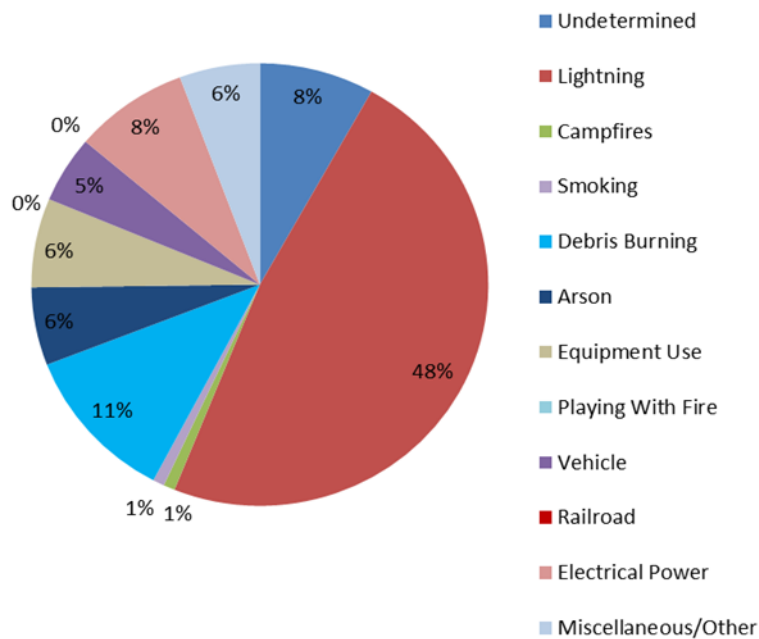
Numerous hours of staff time were spent in with Local and Federal government cooperators assisting them in combined fire prevention efforts. Staff hours were also spent aiding Fire Safe Councils in their fuel reduction and fire prevention education efforts.

## 2019 Siskiyou Unit Ignition Analysis

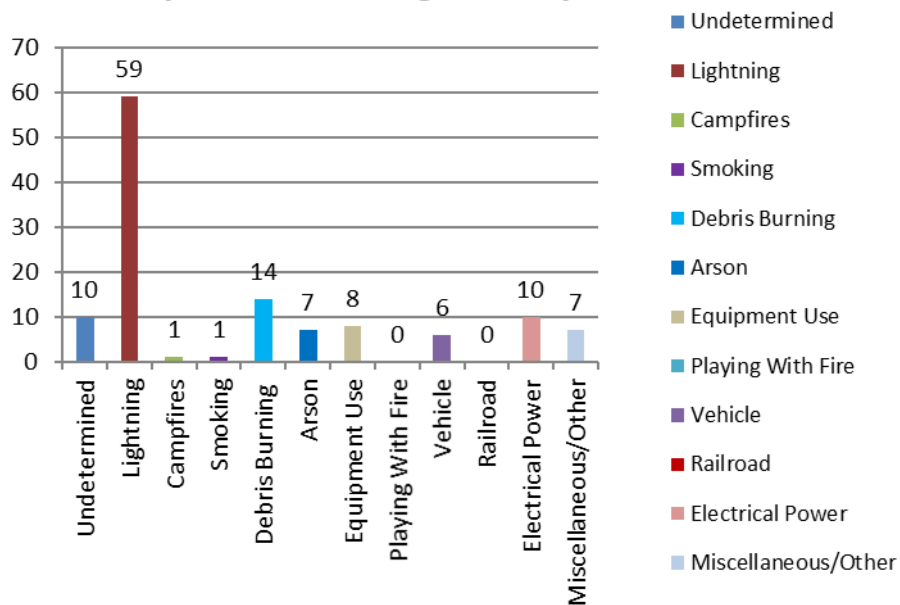
In 2019 the Siskiyou Unit had 123 vegetation fires burning 146.45 acres within the State Direct Protection Area. This was up by 24 fires from the previous year and up about 16 from the 10-year average. Lightning was the number one cause of ignitions within the Unit at 59 which is 34 more than the 10-year average and is the main reason for an above average number of ignitions in the Unit. The ignition analysis showed that debris burn escapes were the major preventable cause of fires last year but was within the 10-year average. The number of undetermined fires in the Unit was up by 1 fire from last year but was still about 40 percent lower than the 10-year average, which indicates that efforts by Prevention staff to train and assist field staff with investigations continues to be successful. 7 fires within the Unit were determined to be caused by arson which is up from only 1 last year. Electrical caused fires were up from 2 last year to 10 this year which is about 50 percent more than the 10-year average. All other ignitions in the Unit were near or below the 10-year average. GIS mapping data was collected for 9 SRA vegetation fires within the unit and submitted to the Fire and Resource Assessment Program.

2019 Causes	Number by Causes	Acres Burned
Undetermined	10	5.95
Lightning	59	53.8
Campfires	1	0.1
Smoking	1	9.69
Debris Burning	14	20.78
Arson	7	.68
Equipment Use	8	6.78
Playing with Fire	0	0
Vehicle	6	3.99
Railroad	0	0
Electrical Power	10	37.9
Miscellaneous/Other	7	6.78
<b>Total:</b>	<b>123</b>	<b>146.45</b>

### 2019 Siskiyou Unit Ignitons - Cause Percentages



### 2019 Siskiyou Unit - Total Ignitons By Cause



## **Scott Valley Battalion 2019 Ignition Analysis and Achievements**

### **Achievements:**

In 2019, Battalion personnel worked throughout Siskiyou County on Unit fuel reduction projects. The Battalions personnel and equipment attributed to the Units successful completion of these critical projects. These projects will help protect Siskiyou County communities and first responders from the damaging effects of catastrophic wildfires. Battalion personnel worked with local landowners within Scott Valley to educate and assist them with fuel reduction projects, utilizing broadcast burning to enhance agriculture production and fire safe landscapes. Opening and maintaining fire access roads continued to be a priority in the Battalion. Work continued through cooperation with private timber companies and landowners to open fire access roads that were previously impassable.

One of Scott Valleys large timber landowners, Eco Trust, received grant funding for a local project. The project includes fuel reduction as well as access and egress improvement on their lands in the Crystal creek area. This project builds on the maintenance and future continuation of Etna Fuel Break. The project also contributes to the protection of citizens and landowners from wildfires on the west side of Scott Valley. The Lower Scott River Fire Safe Council was successful in contacting and obtaining permission to place a water storage tank at the desired project location. The council is moving forward with the purchase and installation of a skid mounted water tank for fire suppression use in the lower Scott River Road area. The Scott River Ranch VMP Project in the McConaughy Gulch area has been approved. This project is a 10-year project to improve habitat and range land as well as reducing potential ignition and spread of catastrophic wildfires in the area. The project consists of utilizing CAL FIRE personnel and equipment to conduct pile and broadcast burning. By reducing fuel loading and reintroducing controlled fire to the landscape, the area will be more resilient to the damaging effects of potential wildfires upon completion. The Unit received assistance from CAL FIRE Northern Region staff in completing environmental compliance documents and other important portions of the project to ensure the successful approval of the VMP project. Battalion personnel also assisted residents and landowners with fuel reduction, focused on ingress and egress, along Mill Creek Road. This project will continue and is anticipated to be completed in 2020. The project enhances the safety of residences and property owners the area as well as first responders.

Battalion personnel continued to foster cooperative relationships with local and federal counterparts, participating in local and multi-agency training exercises. The battalion worked with the Units Fire Prevention Bureau participating in local events. This created direct contact with community members for public education. Fire Prevention education topics included the leading causes of fires within the battalion and unit. Scott Valley Battalion personnel alone completed over

150 LE-100 fire safety inspections within Scott Valley in 2019 to help ensure the safety of residents and first responders.

In 2019 the total number of fire ignitions and burned acres within the Scott Valley Battalion were down slightly from historical averages.

#### Ignition Analysis:

In 2019, the Scott Valley Battalion had 25 ignitions totaling 22.68 acres, which was higher than the previous year. This increase can be attributed to the number of lightning caused fires. Lightning was the leading cause of fires within the battalion with 15 ignitions totaling 10.76 acres burned. Aggressive fire suppression, lookout staffing, landowner relationships and available suppression resources contributed to the quick containment and minimal acres burned in these ignitions. Battalion personnel will continue to work with landowners to keep access roads open and foster cooperative relationships to aid in the suppression of these ignitions.

The Battalion had 3 debris burn and equipment caused fires which were the second leading causes of fire ignitions. This was down slightly from last year and historical averages. Additional prevention signs, as well as increasing efforts in posting social media content to assist with public education regarding fire safety when burning seems to have decreased these ignitions. Fire personnel will continue to educate the public while issuing LE-5 burn permits at the fire station. Battalion personnel will conduct random burn pile inspections when burning is observed and continue education efforts at local events like the Etna Rodeo.

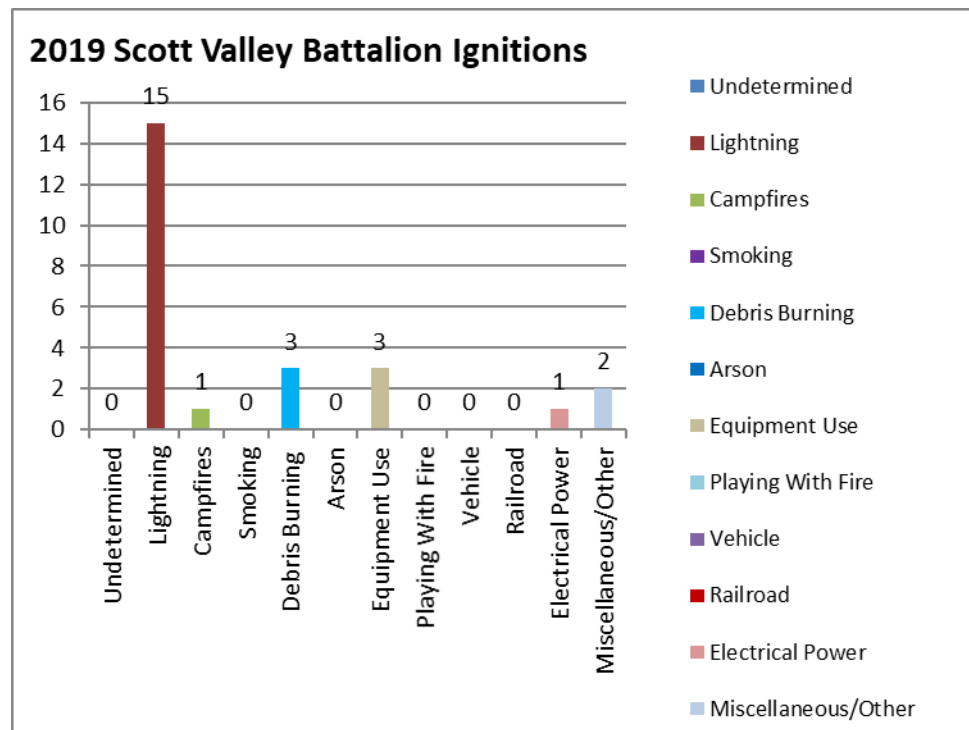
Increased training and education for battalion personnel related to fire investigation and scene preservation has also reduced the number of undetermined caused fires in the battalion from previous years.

All other fire ignitions remain within historical average.

In 2020 the Scott Valley Battalion will continue to look for opportunities to work with the community on fuel breaks in and around populated areas. The focus of these fuel breaks will be to improve ingress and egress routes for communities within the battalion as well as protecting communities, critical infrastructure, and timber lands. The Battalion will also continue to work to identifying locations for the implementation and completion of fuel reduction projects within these strategic locations. The goal for these projects will be to reduce available fuel for fire ignitions and reduce the spread of wildland fires within Scott Valley.

## 2019 Scott Valley Battalion Ignitions

2019 Batt I	Number by Causes	Acres Burned
Undetermined	0	0
Lightning	15	10.76
Campfires	1	0.1
Smoking	0	0
Debris Burning	3	9.57
Arson	0	0
Equipment Use	3	1.12
Playing With Fire	0	0
Vehicle	0	0
Railroad	0	0
Electrical Power	1	1
Miscellaneous/Other	2	0.13
<b>Total:</b>	<b>25</b>	<b>22.68</b>



## **Shasta Valley Battalion 2019- Achievements and Ignition Analysis**

### **Achievements**

In 2019, the Shasta Valley Battalion's greatest accomplishment was limiting all but one vegetation fire to less than 10 acres in size. In 2019, the Battalion recorded 56 ignitions with a total acreage burned of only 99.32 acres. This computes to an average of 1.77 acres per ignition. This puts the Battalion well under the State goal of 90% of the fires controlled at 10 acres or less.

The Yreka Fire Safe council continued its efforts to educate the public in the area and sought more citizen involvement along with identifying funding for additional Fire Safe projects. They received a grant for State funding, to analyze fire behavior in the Yreka area. The Fire Safe Council hopes to utilize existing projects and tie these together with the USFS Craggy Fuel Break project. The Craggy project will provide a fuel break on Humbug and Gunsight ridges helping to protect the city of Yreka.

CALFIRE partnered with TREX two years ago, assisting with a fuel reduction and modification project on the Bogus Creek Ranch near Copco Lake. The 1400-acre Bogus Creek VMP ties into the work completed with TREX. Battalion personnel continued site preparation for prescribed burning, which the Unit hopes to begin in 2020. The Nature Conservancy also partnered with CALFIRE on their property in the Shasta Valley in hopes of improving range through burning approximately 1400 acres of non-native grasses and juniper. This property was purchased by the Department of Fish and Wildlife and future fire management cooperation is expected. Shasta Valley Battalion personnel in conjunction with other CAL FIRE Siskiyou Unit personnel completed the White Rock prescribed fire project and will revisit maintenance in the future. Other fuel reduction projects completed in 2019 include the Baird Ranch, Baird Ranch Phase 2, Hornbrook Station Klamathon Fire Cleanup and multiple projects assisting the Klamath National Forrest.

Currently, CALFIRE is in the early planning phases with several fuel reduction projects around the Yreka area. Most of these projects are expected to tie into the current USFS Craggy Fuel project and past Fire Safe Council fuel reduction efforts.

## Ignition Analysis

In 2019, the Shasta Valley Battalion saw a significant increase in total ignitions. Lightning was the driving force behind the ignition increase and was the top ignition source which was consistent with historical trends. Early augmentation of suppression resources and early detection efforts during lighting activity, helped keep all fires small. The second leading cause of fires in the Battalion was debris burn escapes and power line caused fires with 6 each. Undetermined fires were down about 70 percent from historical averages.

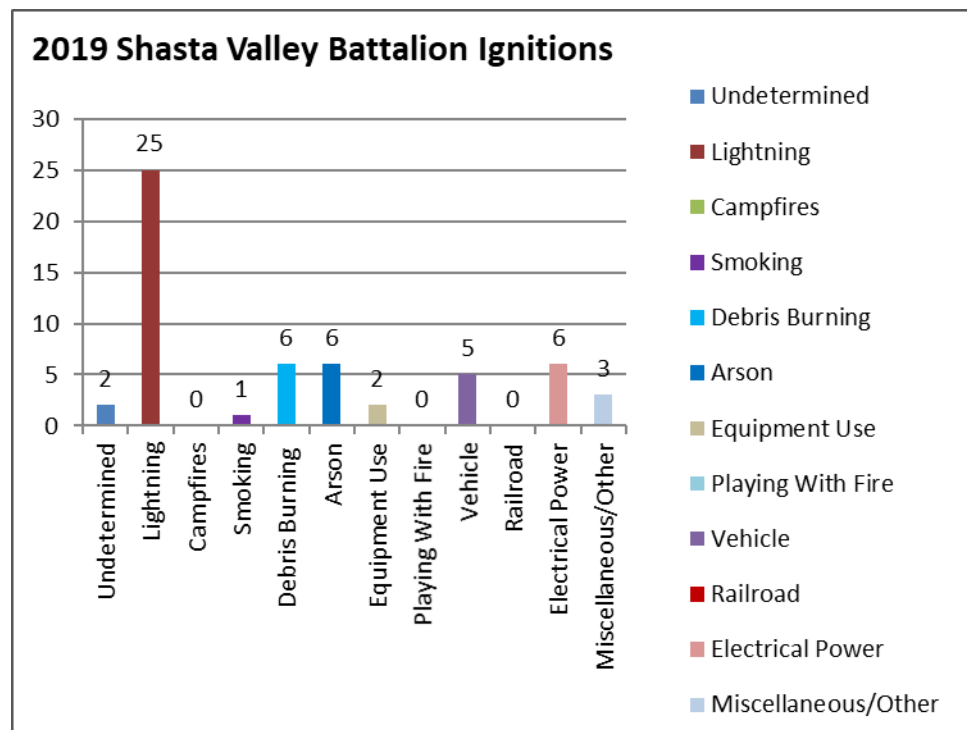
Battalion personnel will continue to educate the public through the burn permit process including burning regulations, site inspections and public outreach in conjunction with the Prevention Bureau. Battalion personnel will work with pre-fire to complete power line inspections in State Responsibility Areas within the Shasta Valley Battalion. Battalion personnel have worked closely with the Prevention Bureau to gain more education and experience in conducting origin and cause investigations which resulted in less fire caused being undetermined.

The largest fire in the Shasta Valley was the Rocky fire. The fire grew to approximately 16 acres. The Rocky fire was an electrical caused fire. All other fires were kept to less than 10 acres and were near or below historical averages.

Large fast-moving fires are becoming more of a trend throughout the state. Traditional fuel breaks have shown to be less effective when suppressing these types of fires. Therefore, fuel reduction efforts within the Shasta Valley Battalion, will focus on improving ingress and egress for communities, protecting critical infrastructure and creating a fire resilient environment while protecting natural resources.

## 2019 Shasta Valley Battalion Ignitions

2019 Batt II	Number by Causes	Acres Burned
Undetermined	2	0.44
Lightning	25	32.96
Campfires	0	0
Smoking	1	9.69
Debris Burning	6	10.58
Arson	6	0.43
Equipment Use	2	1.1
Playing With Fire	0	0
Vehicle	5	3.89
Railroad	0	0
Electrical Power	6	33.73
Miscellaneous/Other	3	6.5
<b>Total:</b>	<b>56</b>	<b>99.32</b>



## **Butte Valley / Weed Battalion 2019- Ignition Analysis and Achievements**

### *Achievements*

2019 was a slower year for fire activity in the Battalion which allowed personnel to focus on new and continuing fuels reduction projects. Butte Valley / Weed Battalion completed the 496-acre Shasta "O" Ranch Vegetation Management Program (VMP). The project was approved in 2017 and was completed using mechanical thinning and pile and broadcast burning as weather, fuels and resource availability allowed. The Shasta "O" Ranch VMP is located just north of Weed City and southwest of the Lake Shastina community and ties into Greater Lake Shastina Fire Safe Council's completed fuel reduction project along Ordway Road. In December of 2019 Butte Valley / Weed Battalion completed the Lake Shastina Fuels Treatment Project. This project was completed using mastication and chipper/chainsaw work treating one hundred feet on both sides of the roads for ingress/egress and community protection. The project treated 389 acres on Highway 97 north from Big Springs Road to Highway A12, Big Springs Road from Highway 97 to Seldom Seen Ranch Road, and Jackson Ranch Road two miles west to the Shasta "O" Ranch. This project connected multiple other projects sharing a common boundary increasing fire resiliency and ingress/egress for Lake Shastina. The fuel break will help protect the community from fire advancing from the south, east and west. In addition, helping to reduce the dead and down fuel load from past historical fires in the area including the Hoy and Hotlum Fires.

Battalion personnel assisted The Klamath National Forest with prescribed burns in the Tennant area with a 500-acre prescribed burn on the Klamath National Forest as well as the Bureau of Land Management with pile burning in Butte Valley. Participating in these prescribed burns encourages interagency cooperation, area orientation and provides valuable training and experience to Battalion and Unit personnel.

The Butte Valley / Weed Battalion continues to focus on improving emergency ingress and egress routes for at-risk communities. Weed and Macdoel station personnel continued with local chipping projects in coordination with the Juniper Flat Fire Safe Council in Mt Shasta Vista and the Hammond Ranch Fire Safe Council. The focus of the chipping projects is to improve ingress and egress of easements in subdivisions where vegetation has built up and impedes civilian evacuation and emergency responder access. The Mt Shasta Vista subdivision continues to be an area of concern for fuels reduction and civilian safety, which is at high risk due to local wind patterns, extended response times, narrow winding roads and a high concentration of non-English speaking population involved in the marijuana industry. February of 2020, Juniper Flat Fire Safe Council received a CAL FIRE CCI Fire Prevention Grant for \$812,000 to complete 433 acres of fuel reduction (100ft each side) along the roads in the Mount Shasta Vista Sub-Division. The project will utilize mastication and chipper/chainsaw work to provide valuable ingress, egress, and defensible space for the citizens in that area. The project is scheduled to begin in September of 2020. Additional fuel reduction projects will continue to be evaluated and planned to protect communities, critical infrastructure, and natural resources in the Butte Valley / Weed Battalion.

Close coordination between Butte Valley / Weed Battalion and Fire Safe Councils continued through 2019 with five active Fire Safe Councils either applying for grants or contributing to grants to reduce fuels and improve ingress and egress. The Fire Safe Council of Siskiyou County submitted a "Siskiyou County Multi-Communities Fuels Reduction Project" grant via CAL FIRE's California Climate Investments Fire Prevention Grant Program that would include the Greater Lake Shastina area, Mt. Shasta Vista subdivision and the Hidden Meadow subdivision. Additionally, the Hammond Ranch Fire Safe Council applied for a "Hammond Ranch Area Hazardous Fuels Reduction Program". These grants, if awarded in 2020, encompass entire subdivisions and reduce fuels along main roads that are overgrown with vegetation and pose a threat to evacuation routes and firefighter access.

The Battalion staff continuously attends and/or participates in community events. In 2019 a community pre-fire season awareness and fire safety discussion was presented to a local Hmong community using a language interpreter. Battalion personnel continue to deliver educational and fire prevention out-reach programs to schools in the battalion.

### Ignition Analysis

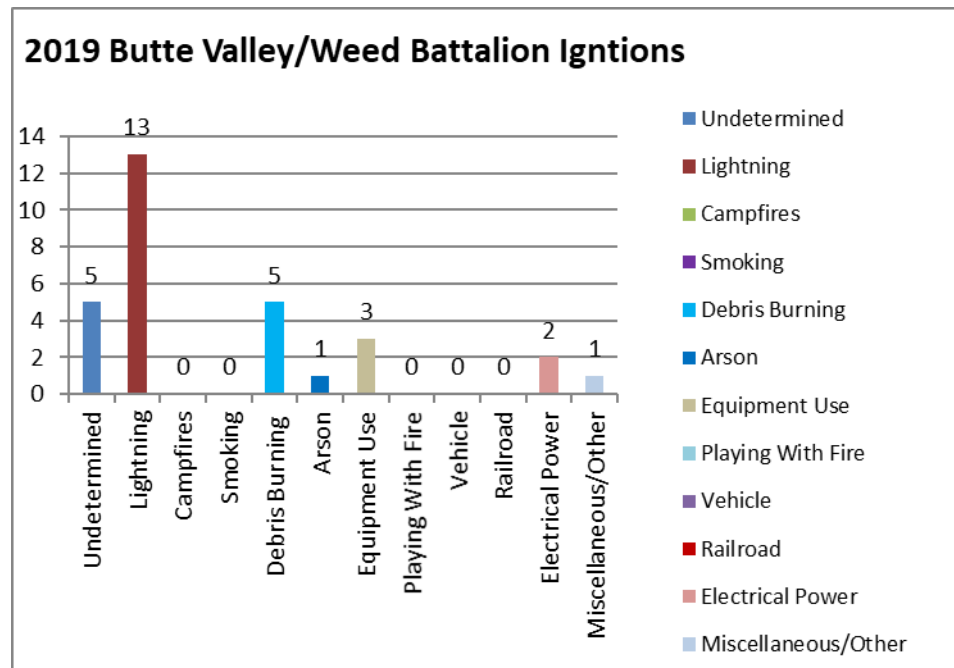
In 2019, there were 30 ignitions in the Battalion, compared to 40 ignitions in 2018. This is down 10 from last year which may be a result of focused fire prevention education, widespread media coverage of large fires and an unusually wet winter. In 2019 the total acreage burned in the battalion was 18.53 acres, compared to 254.68 acres burned in 2018. Resource availability and early detection aided in quick fire suppression keeping all fires within the Battalion less than 10 acres.

The battalion experienced 13 lightning fires, down from 17 in 2018, making lightning the highest cause of ignitions in the Battalion for two years in a row. Work will continue with landowners and cooperating agencies to improve ingress and egress for areas with high lightning occurrence to aid in quick fire detection and suppression. In 2019, debris burning continued to be the battalion's second highest number of fires caused with 5 fires burning 0.63 acres. Battalion personnel will focus on increasing public education on safe residential and agricultural burning in 2020 working with the Public Information Officer to increase prevention efforts. The Battalion had 5 fires that were undetermined which was up by 1 from last year and was also the second leading cause of fires. To better understand the fire problem in the Battalion, it is important to reduce the number of undetermined fires to better target prevention efforts. Battalion personnel will work with the Prevention Bureau to get additional training and experience with cause and origin investigations. Equipment use was determined as the cause of 3 fires which burned 4.56 acres. Equipment use fires increased from 2018 which will also be a focus of fire prevention in 2020.

The Butte Valley/ Weed Battalion will continue to focus on preventing and reducing the number of all vegetation fires through public education events, media, fuel reduction, pre-planning and any other means that are feasible. All other ignitions were near or below historical averages.

## 2019 Butte Valley/ Weed Battalion Ignitions

2019 Batt III	Number by Causes	Acres Burned
Undetermined	5	0.81
Lightning	13	9.07
Campfires	0	0
Smoking	0	0
Debris Burning	5	0.63
Arson	1	0.25
Equipment Use	3	4.56
Playing With Fire	0	0
Vehicle	0	0
Railroad	0	0
Electrical Power	2	3.16
Miscellaneous/Other	1	0.05
<b>Total:</b>	<b>30</b>	<b>18.53</b>



## **McCloud Battalion 2019-Ignition Analysis and Achievements**

### **Achievements**

2019 saw many accomplishments in the McCloud Battalion highlighted by the restarting of the McCloud and the Dunsmuir Fire Safe Councils. Fuel reduction work continued through the Fire Safe Council of Siskiyou County around the City of Mount Shasta, with fuel break projects initiated, completed, and maintained utilizing chipper days, Deadwood Crews and Engine Companies within the Battalion. Completed projects included the Shasta Acres community chipping project and phase 1 and 2 of the South Mt. Shasta Fuel Break. Maintenance work continues for fuel reduction projects at Mt. Shasta Fish Hatchery and at the Mt. Shasta sewer ponds. Collaboration between CAL FIRE, the United States Forest Service, local Timber Companies, Fire Safe Councils and local Fire Departments for pre-fire planning and fire prevention will continue to be a priority in the Battalion. The McCloud Battalion assisted the Shasta Trinity National Forest with prescribed burning on the Pilgrim Creek and Elk projects. Battalion personnel assisted with the Governors 45-day fuels project, the Lake Shastina Fuels Treatment. The number of defensible space inspections in the Battalion continued with an emphasis on compliance and public education. Timber companies continue to add fuel breaks while also maintaining existing fuel breaks and roadways. Collaboration with cooperators continues to be a critical asset in pre planning and fire suppression.

McCloud Battalion personnel are involved in the local Fire Safe Council and School programs in addition to outreach events designed to educate the public on the importance of wildfire awareness through various means such as the Ready, Set, Go, Code Red and defensible space programs. The McCloud Fire Safe Council was awarded a grant through CAL FIRE's California Climate Investments Fire Prevention Grant Program that will establish a shaded fuel break around the town of McCloud for \$775,066.00 with work beginning in 2020.

The Siskiyou Unit is working with CAL TRANS on the reentry and maintenance of the Azalea Fuel break on Interstate 5 from Dunsmuir to Azalea Rd. This project will treat both sides of Interstate 5 within the CAL TRANS right-of-way. This is the first of three phases to treat fuels along the Interstate 5 Right-of-Way from Dunsmuir to Edgewood Rd. The unit is has also began maintenance of the Squaw Valley fuel break.

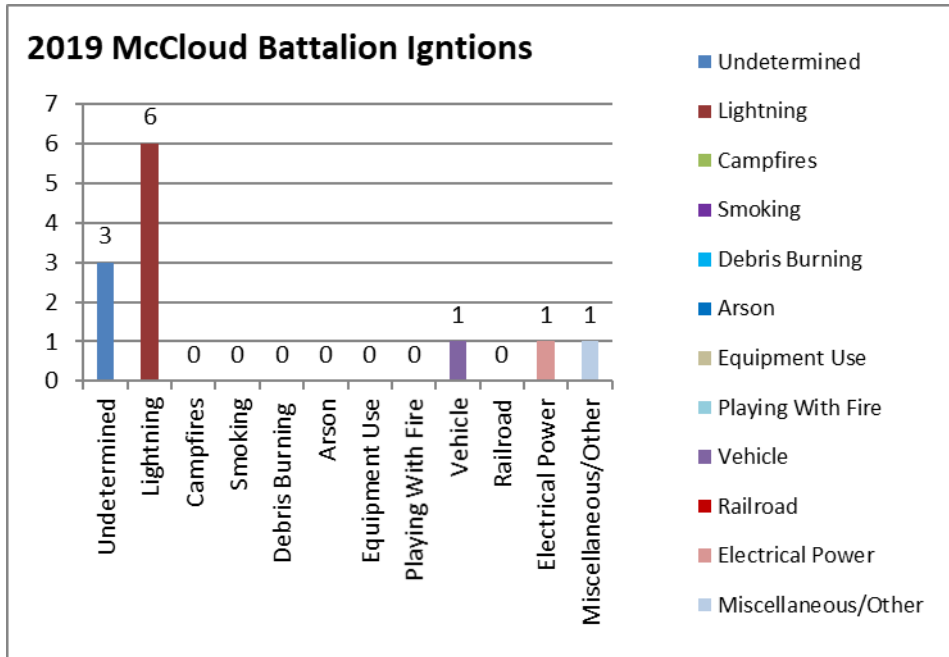
## Ignition analysis

In 2019, the McCloud Battalion had 12 ignitions totaling 5.92 acres, which was down 33 percent from the previous year. This overall decrease can be attributed to fewer human caused fires as lightning caused fires were the same as in 2018. Lightning, which is historically the number one cause of wildland fires in the Unit and Battalion, was the leading cause of fires within the Battalion for 2019 with 6 ignitions totaling 1.01 acres burned. Resource availability, quick suppression, and cooperative efforts aided in keeping all fires to a minimum. Battalion personnel will continue to foster cooperation with local landowners, Fire Safe Councils, and other fire agencies to seek opportunities to improve access to aid in the quick response and suppression of lightning caused fires.

The Battalion had 3 undetermined caused fires which was the second leading causes of fire ignitions. This was up slightly from last year. Battalion personnel will work with the Prevention Bureau to increase proficiency in wildfire origin and cause investigations. Reducing the number of undetermined fires is critical to better understand the prevention needs of the Battalion. The number of escaped debris burns fell to zero in 2019, down from 3 in 2018. Historically this is the second leading cause of fires in the Unit and Battalion. Increased efforts in posting fire prevention education messages on social media and public outreach on fire safety when burning seems to have decreased these ignitions. Fire personnel will continue to personally educate the public while issuing LE-5 burn permits at the fire station and while conducting burn pile and defensible space inspections. Station personnel will continue education efforts at local events in the Battalion. All other wildland fire ignitions were near or below historical trends.

In 2020 the McCloud Battalion will work with cooperators and the public to plan and execute fuel reduction projects that protect communities and strengthen ingress and egress on major routes of travel. Fuel reduction work will focus on protecting communities, improving ingress and egress, protecting critical infrastructure, and enhancing natural resources. The Battalion will also look to identify other areas that fit these criteria for future projects with the goal being to reduce the number and size of wildland fires in the Battalion.

2019 Batt IV	Number by Causes	Acres Burned
Undetermined	3	4.7
Lightning	6	1.01
Campfires	0	0
Smoking	0	0
Debris Burning	0	0
Arson	0	0
Equipment Use	0	0
Playing With Fire	0	0
Vehicle	1	0.1
Railroad	0	0
Electrical Power	1	0.01
Miscellaneous/Other	1	0.1
<b>Total:</b>	<b>12</b>	<b>5.92</b>



## ***ANNUAL ACCOMPLISHMENTS REPORTING 2019***

### **Fire Planning:**

In 2019 fuel reduction work continued to be a priority on multiple CAL FIRE and Fire Safe Council projects. These projects included the Lake Shastina Fuel Treatment, Shasta Valley Wildlife Area, South Mount Shasta Fuel Break, Squaw Valley Fuel Break, Ordway VMP, Bogus Creek VMP, White Rock broadcast burn, Castle Crags Project, Siskiyou County Flood Control, Deadwood Defensible Space, Weed City Water Tanks, along with many other projects.

Siskiyou Unit Personnel participated in the review and editing of various Community Wildfire Protection Plans including the Siskiyou County CWPP Update.

The Siskiyou Unit recognizes the necessity for maintenance to be completed on multiple fuel breaks within the Unit. Maintenance grants have been challenging to obtain by Siskiyou County Fire Safe Councils. The Unit would be more fire resilient by maintaining and constructing strategically located fuel breaks rather than completing fuel breaks in non-strategic areas.

### **Investigations and Enforcement:**

In 2019 the Siskiyou Unit investigated 187 total SRA fires with various causes, 123 of which were vegetation fires. The ignition analysis shows that debris burn escapes was the major preventable cause of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to steadily increase. Seven fires within the Unit were determined to be caused by arson which was up from 1 last year and was up from the 10-year average.

During the year, the Prevention Bureau took the following enforcement actions: 3 custodial fire related arrests, 33 citations, 3 District Attorney Complaints, and multiple assists to other law enforcement agencies. 25 LE-38 notices of fire hazard inspection were issued due to illegal burning within the Unit.

### **Wildland Fire Prevention Engineering:**

The Siskiyou Unit processed a total of 120 building permit applications and conducted 30 plan reviews in 2019.

**Education and Information:**

Fire prevention and education programs were conducted throughout the year. These accomplishments included: 20 fire prevention displays/presentations, over 38,500 public contacts, 8000 contacts with students through school programs and maintenance of 21 fire prevention signs. The prevention bureau processed 5855 defensible space inspections, an increase of 2387 from the previous year. Unit Forestry aids were instrumental in completing these inspections, while also being instrumental in supporting the Lake Shastina Fuels Treatment Project. There were 167 media contacts made for fire information and/or prevention education. Numerous hours of staff time were spent with outreaches to local and federal government cooperators and fire safe councils in aiding them in fire prevention efforts.

**Vegetation Management:**

Fuel reduction work continues to be a priority within the Siskiyou unit. In 2019 many fuel reduction projects were completed as well as new projects planned. Fuel reduction work was completed on the 500-acre Vegetation Management Program (VMP) contract on the Ordway Ranch in Weed. Treatments included a hand and tractor piling, pile burning and prescribed burning. Prescribed fire burn preparation began on the 1400-acre Bogus Creek VMP in anticipation of burning in 2020. The Scott River Ranch VMP located in Scott Valley was approved in 2019 with preparation work beginning in 2020. Planning has begun for several other VMP and fuel reduction projects including the Golden Gate Flat VMP, several smaller VMPs in the Yreka area, the Azalea Fuel Break in Dunsmuir and the Squaw Valley Fuel Break in McCloud.

**Volunteerism:**

Volunteers in Prevention put in 3000 hours of Fire Prevention activity within the Unit. Volunteer hours were combined from Honor Guard, Lookouts, Siskiyou Golden Fair, Fire Pals, School programs and training.

**Fire Hazard Severity Mapping and Mitigation:**

No Fire Hazard Mapping was conducted in 2019. Fuel reduction projects to be conducted throughout Siskiyou County continue to be considered short term mitigations for fire hazard severity.

**Other Fire Prevention Projects in SRA:**

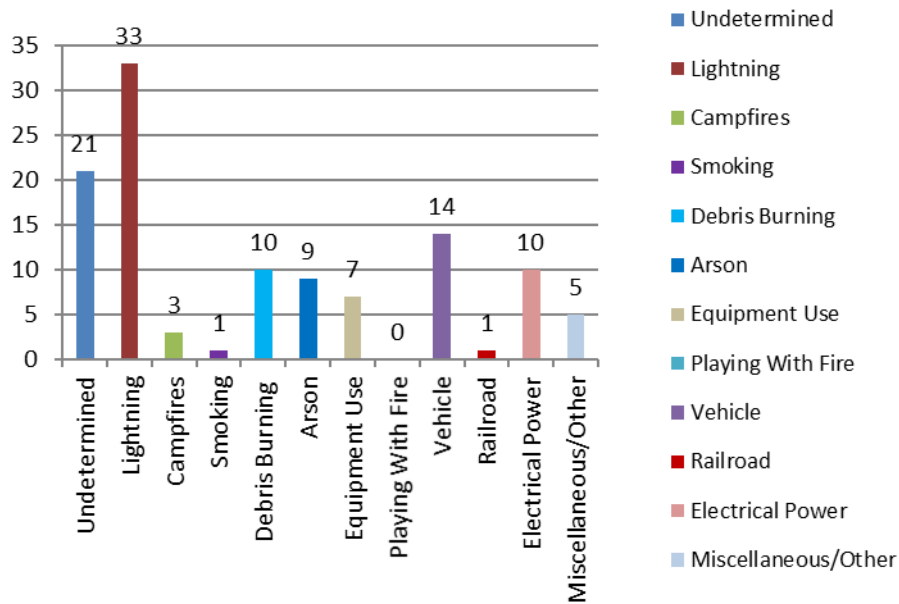
Numerous hours of staff time were spent in with Local and Federal government cooperators assisting them in combined fire prevention efforts. Staff hours were also spent aiding Fire Safe Councils in their fuel reduction and fire prevention education efforts.

## 2020 Siskiyou Unit Ignition Analysis

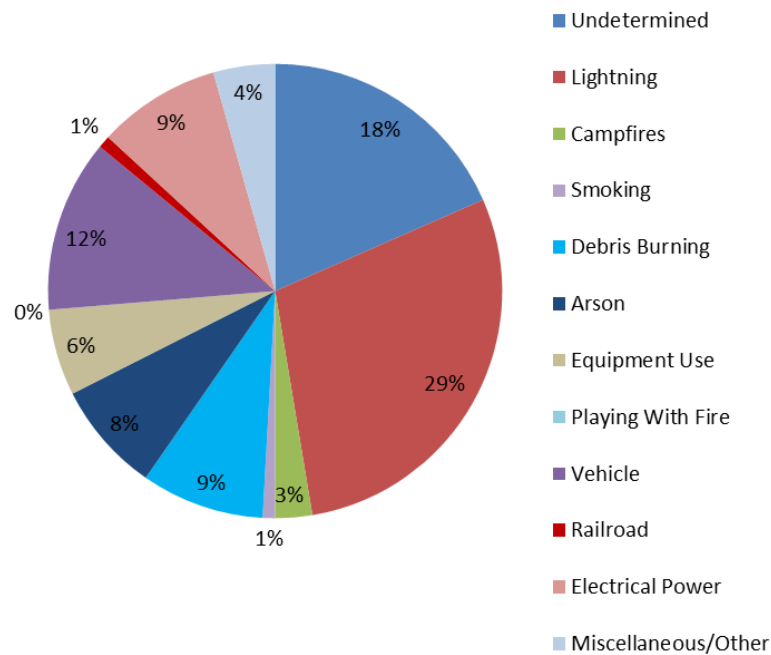
In 2020 the Siskiyou Unit had 114 vegetation fires burning 747.22 acres within the State Direct Protection Area. This was down by 9 fires from the previous year and up about 7 from the average. Lightning was the number one cause of ignitions within the Unit at 33 which is near average. The ignition analysis showed that vehicle caused fires were the major preventable cause of fires last year, almost three times the 11-year average. The number of undetermined fires in the Unit was up by 11 fires from last year and was above the 11-year average. The Unit had 9 Arson fires which is up from 7 last year and is nearly twice the 11-year average. Debris burning caused fires were 33 percent below the Unit average which is likely a direct result of focused fire prevention education and enforcement. All other ignitions in the Unit were near or below the 10-year average. GIS mapping data was collected for 17 SRA vegetation fires within the unit and submitted to the Fire and Resource Assessment Program.

SKU 2020	Number by Causes	Acres Burned	2010 to 2020 Causes	Number by Causes	Yearly Average
Undetermined	21	112.2	Undetermined	185	17
Lightning	33	30.81	Lightning	383	35
Campfires	3	1.2	Campfires	63	6
Smoking	1	0.9	Smoking	17	1.5
Debris Burning	10	21.14	Debris Burning	164	15
Arson	9	0.27	Arson	50	5
Equipment Use	7	9.6	Equipment Use	80	7
Playing With Fire	0	0	Playing With Fire	14	1.3
Vehicle	14	560.94	Vehicle	54	5
Railroad	1	0.2	Railroad	10	0.9
Electrical Power	10	8.6	Electrical Power	58	5
Miscellaneous/Other	5	1.36	Miscellaneous/Other	103	9
<b>Total:</b>	<b>114</b>	<b>747.22</b>	<b>Total:</b>	<b>1181</b>	<b>107.3</b>

### 2020 Siskiyou Unit - Total Ignitions By Cause



### 2020 Siskiyou Unit Ignitions - Cause Percentages



## **Scott Valley Battalion 2020 Ignition Analysis and Achievements**

### **Achievements:**

In 2020, Battalion personnel worked throughout Siskiyou County on Unit fuel reduction projects. The Battalions personnel and equipment attributed to the Units successful completion of these critical projects. These projects will help protect Siskiyou County communities and first responders from the damaging effects of catastrophic wildfires. Battalion personnel worked with local landowners within Scott Valley to educate and assist them with fuel reduction projects, utilizing broadcast burning to enhance agriculture production and fire safe landscapes. Opening and maintaining fire access roads continued to be a priority in the Battalion. Work continued through cooperation with private timber companies and landowners to open fire access roads that were previously impassable.

Eco Trust received grant funding for a local project and continues with fuel reduction as well as access and egress improvement on their lands in the Crystal creek area. This project builds on the maintenance and future continuation of Etna Fuel Break. The project also contributes to the protection of citizens and landowners from wildfires on the west side of Scott Valley. The Lower Scott River Fire Safe Council (LSRFSC) has made progress on a water tank project. The tanks are in place and work continues with the plumbing. The LSRFSC is currently working on grant proposals for both fuel breaks and pre-fire planning. These proposals include creating maps and GIS databases to utilize in pre-plans as well as fuel breaks along Scott River Road that will increase ingress and egress for the public and first responders. The French Creek, Quartz Valley area, Rattlesnake Creek, Scott Bar, Seiad and Scott Valley Fire Safe Councils will be cooperatively applying for three grants to include fuel reduction around the Partridge Pine Community, Defensible Space for disabled and elderly in the Scott Valley area, and ingress and egress in the Seiad Creek Community.

The Scott River Water Shed Council will also submit grants for fuels reduction projects in Scott Valley that will tie into previous completed fuel breaks and proposed Fire Safe Council grant fuel breaks.

The Scott River Ranch VMP Project in the McConaughy Gulch area continues to move forward. This project is in year 2 of 10-year contract and will improve habitat and range land as well as reducing potential ignition and spread of catastrophic wildfires in the area. CAL FIRE personnel and equipment were able conduct pile and broadcast burning this winter and will continue with mechanical treatment and plan for a broadcast burn at the end of this year. By reducing fuel loading and reintroducing controlled fire to the landscape, the area will be more resilient to the damaging effects of potential wildfires upon completion. The Unit received assistance from CAL FIRE Northern Region staff in completing environmental compliance documents and other important portions of the project to ensure the successful approval of the VMP project. Battalion personnel also assisted residents and landowners with fuel reduction, focused on ingress and egress, along Mill Creek Road. This project will continue and is anticipated to be completed in

2020. The project enhances the safety of residences and property owners the area as well as first responders.

Battalion personnel continued to foster cooperative relationships with local and federal counterparts, participating in local and multi-agency training exercises. The battalion worked with the Units Fire Prevention Bureau participating in local events. This created direct contact with community members for public education. Fire Prevention education topics included the leading causes of fires within the battalion and unit. Scott Valley Battalion personnel alone completed over 150 LE-100 fire safety inspections within Scott Valley in 2020 to help ensure the safety of residents and first responders.

In 2020 the total number of fire ignitions and burned acres within the Scott Valley Battalion slightly increased from historical averages.

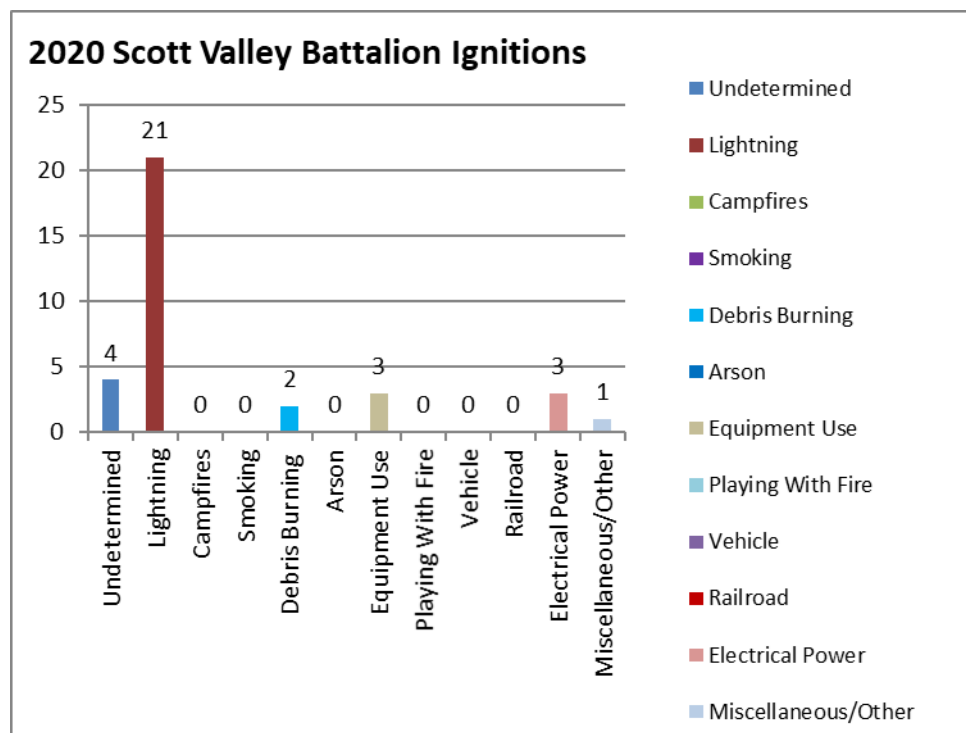
#### Ignition Analysis:

In 2020, the Scott Valley Battalion had 34 ignitions totaling 111.82 acres, which was higher than the previous year. This increase can be attributed to 6 additional lightning caused fires. Lightning was the leading cause of fires within the Battalion with 21 ignitions totaling 13.11 acres burned. Aggressive fire suppression, lookout staffing, landowner relationships and available suppression resources contributed to the quick containment and minimal acres burned in these ignitions. Battalion personnel will continue to work with landowners to keep access roads open and foster cooperative relationships to aid in the suppression of these ignitions.

The Battalion had 4 undetermined fires which was the second leading causes of fire ignitions. Debris burning caused fires were down from last year and about half of the historical average. Electrical and equipment caused fires were tied for the third leading cause of fire ignitions with 3 each. Additional prevention signs and increasing efforts in posting social media content to assist with public education regarding fire safety when burning seems to have decreased these ignitions. Fire personnel will continue to educate the public while issuing LE-5 burn permits at the fire station. Battalion personnel will conduct random burn pile inspections when burning is observed and continue education efforts at local events like the Etna Rodeo.

In 2021 the Scott Valley Battalion will continue to look for opportunities to work with the community on fuel breaks in and around populated areas. The focus of these fuel breaks will be to improve ingress and egress routes for communities within the battalion as well as protecting communities, critical infrastructure, and timber lands. The Battalion will also continue to work to identifying locations for the implementation and completion of fuel reduction projects within these strategic locations. The goal for these projects will be to reduce available fuel for fire ignitions and reduce the spread of wildland fires within Scott Valley.

Batt I	Number	Acres
2020	by	Burned
	Causes	
Undetermined	4	95.1
Lightning	21	13.11
Campfires	0	0
Smoking	0	0
Debris Burning	2	1.01
Arson	0	0
Equipment Use	3	2.1
Playing With Fire	0	0
Vehicle	0	0
Railroad	0	0
Electrical Power	3	0.4
Miscellaneous/Other	1	0.1
<b>Total:</b>	<b>34</b>	<b>111.82</b>



## **Shasta Valley Battalion 2020 - Achievements and Ignition Analysis**

### **Achievements:**

In 2020, the Shasta Valley Battalion was successful in keeping 95% of our fires to less than 10 acres. A decrease in lighting activity had a part in this. Another contributing factor was the successful use of hired equipment for initial attack during resource drawdown. This augmentation included engines, dozers, and helicopters.

The Yreka Fire Safe council continued its efforts to educate the public in the area and sought more citizen involvement along with identifying funding for additional Fire Safe projects. They received a grant for state funding, to analyze fire behavior in the Yreka area. This data is being used to update the Yreka Area Community Wildfire Protection Plan (CWPP). The Fire Safe Council hopes to tie in past and current projects with the USFS Craggy Fuel Break project. The Craggy project will provide a fuel break on Humbug and Gunsight ridges helping to protect the city of Yreka and surrounding communities.

Shasta Valley Battalion personnel in conjunction with other CAL FIRE Siskiyou Unit personnel completed the Newton prescribed fire project, located on the southern edge of Yreka City. This was an 83-acre broadcast burn project with an additional 6 acres of manual fuel treatment. The Battalion has plans to complete phase two of this project in 2021. Other fuel reduction projects completed in 2020 include the KNF Greenhorn, BLM Humbug, and multiple other projects assisting the Klamath National Forest.

Currently, CALFIRE is in the early planning phases with several fuel reduction projects around the Yreka area. Most of these projects are expected to tie into the current USFS Craggy Fuel project and past Fire Safe Council fuel reduction efforts.

## Ignition Analysis:

In 2020, the Shasta Valley Battalion saw a decrease in total ignitions. This reduction in total number of fires can most directly be associated with a below average amount of lighting caused fires.

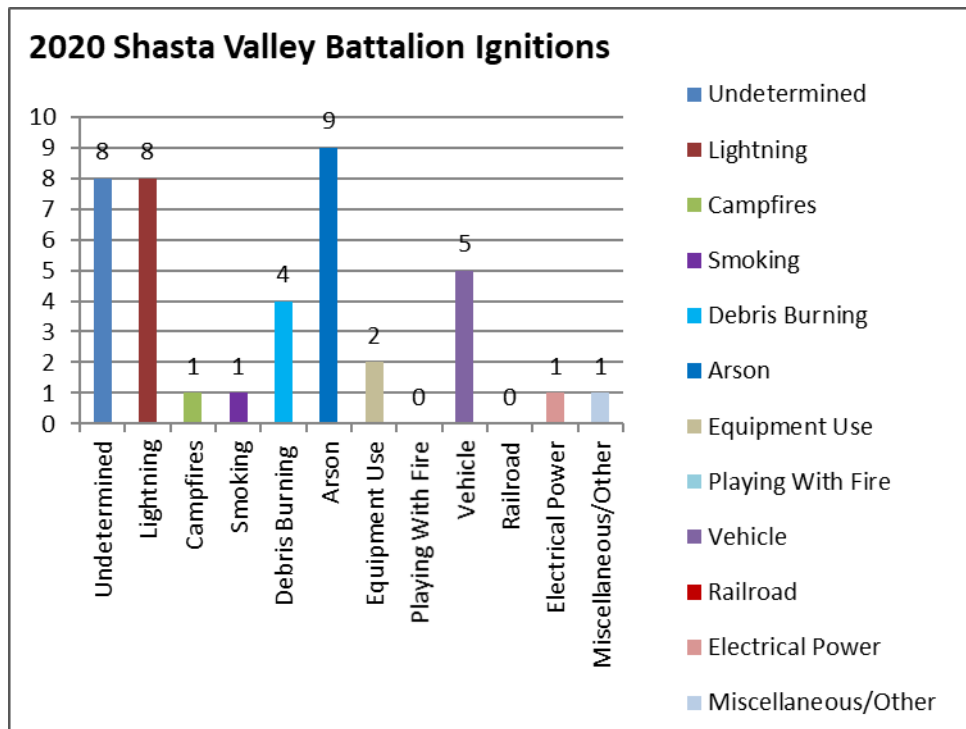
The leading cause of fires in the Battalion for 2020 was Intentionally set fires with a total of nine. This was an increase of 80% above the six-year normal in this category. Fortunately, suppression resources were able to limit the intentionally caused fires to a total of 0.27 acres. Undetermined fires were slightly above the six-year historical average.

The largest fire in the Shasta Valley was the Badger fire. The fire grew to approximately 557 acres. The Badger fire was a vehicle caused fire. The Townsend Fire was the second largest at 13 acres. The Townsend Fire was a debris burn escape. All other ignitions were at or below the historical averages.

Large fast-moving fires are becoming more of a trend throughout the state. Fuel reduction efforts within the Shasta Valley Battalion, will continue to focus on improving ingress and egress for communities, protecting critical infrastructure, and creating a fire resilient environment while protecting natural resources.

Battalion personnel will continue to educate the public through the burn permit process including burning regulations, site inspections and public outreach in conjunction with the Prevention Bureau. Battalion personnel will work closely with the Prevention Bureau to gain more education and experience in preserving fire scenes along with conducting origin and cause investigations. The results of this will help decrease the number of undetermined fires in the Battalion.

Batt II	Number	Acres
2020	by	Burned
	Causes	
Undetermined	8	14.5
Lightning	8	15.4
Campfires	1	0.1
Smoking	1	0.9
Debris Burning	4	16.74
Arson	9	0.27
Equipment Use	2	7
Playing With Fire	0	0
Vehicle	5	559.21
Railroad	0	0
Electrical Power	1	0.1
Miscellaneous/Other	1	0.1
<b>Total:</b>	<b>40</b>	<b>614.32</b>



## **Butte Valley / Weed Battalion 2020- Ignition Analysis and Achievements**

### *Achievements*

Battalion personnel assisted The Klamath National Forest with prescribed burns in the Tennant area with a 500-acre prescribed burn on the Klamath National Forest as well as the Bureau of Land Management with pile burning in Butte Valley. They also assisted with prescribed burns totaling over 2,500 acres with the USFWS in the Tulelake/State line area. Participating in these prescribed burns encourages interagency cooperation, area orientation and provides valuable training and experience to Battalion and Unit personnel.

The Butte Valley / Weed Battalion continues to focus on improving emergency ingress and egress routes for at-risk communities. Weed and Macdoel station personnel continued with local chipping projects in coordination with the Juniper Flat Fire Safe Council in Mt Shasta Vista and the Hammond Ranch Fire Safe Council. The focus of the chipping projects is to improve ingress and egress of easements in subdivisions where vegetation has built up and impedes civilian evacuation and emergency responder access. The Mt. Shasta Vista subdivision continues to be an area of concern for fuels reduction, ingress, and egress. This area is at high risk due to local wind patterns, extended response times, narrow winding roads and a high concentration of people. February of 2020, Juniper Flat Fire Safe Council received a CAL FIRE CCI Fire Prevention Grant for \$812,000 to complete 433 acres of fuel reduction (100ft each side) along the roads in the Mount Shasta Vista Sub-Division. The project will utilize mastication and chipper/chainsaw work to provide valuable ingress, egress, and defensible space for the citizens in that area. As of March 2021, the RFP for the fuel reduction project has been awarded and work will begin as soon as the weather permits. Additional fuel reduction projects will continue to be evaluated and planned to protect communities, critical infrastructure, and natural resources in the Butte Valley / Weed Battalion.

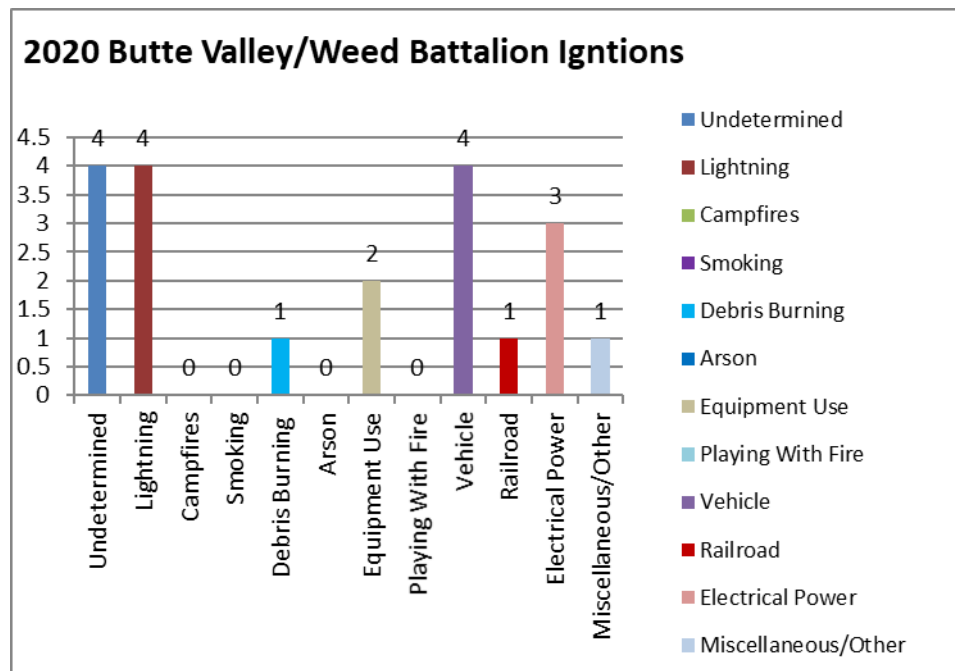
### Ignition Analysis

In 2020, there were 20 ignitions in the Battalion, compared to 30 ignitions in 2019 and 40 in 2018. This is down 20 in the last two years and is 10 below the 6-year average for the Battalion. This is mainly the result of fewer lightning caused fires and partly because of focused fire prevention education, widespread media coverage of recent large fires. In 2020 the total acreage burned in the Battalion was 10.89 acres, which is about 11 percent of the yearly average of 96 acres over the last six years. Resource availability and early detection aided in quick fire suppression keeping all fires within the Battalion less than 10 acres.

The leading causes for 2020 were lightning fires, undetermined fires, and vehicle caused fires. Lightning fires were well under the historical average whereas all other ignitions were near or below average. Historically lightning caused fires are the number one cause of fires in the Unit and Battalion. For this reason, work will continue with landowners and cooperating agencies to improve ingress and egress for areas with high lightning occurrence to aid in quick fire detection and suppression. In 2020, debris burning was about 80 percent lower than the past 6 years. Battalion personnel will focus on increasing public education on safe residential and agricultural burning in 2021 working with the Public Information Officer to increase prevention efforts as this is typically near the top of human caused fires. The Battalion had 4 fires that were undetermined which was down by 1 from last year. To better understand the fire problem in the Battalion, it is important to reduce the number of undetermined fires to better target prevention efforts. Battalion personnel will work with the Prevention Bureau to get additional training and experience with cause and origin investigations. Vehicle was determined as the cause of 4 fires which burned 1.23 acres. Vehicle caused fires increased from 2019 which will also be a focus of fire prevention in 2021.

The Butte Valley/ Weed Battalion will continue to focus on preventing and reducing the number of all vegetation fires through public education events, media, fuel reduction, pre-planning and any other means that are feasible. All other ignitions were near or below historical averages.

<b>Batt III</b>	<b>Number</b>	<b>Acres</b>
<b>2020</b>	<b>by</b>	<b>Burned</b>
	<b>Causes</b>	
Undetermined	4	1.4
Lightning	4	2.3
Campfires	0	0
Smoking	0	0
Debris Burning	1	0.1
Arson	0	0
Equipment Use	2	0.5
Playing With Fire	0	0
Vehicle	4	1.23
Railroad	1	0.2
Electrical Power	3	5.1
Miscellaneous/Oth	1	0.06
<b>Total:</b>	<b>20</b>	<b>10.89</b>



## **McCloud Battalion 2020-Ignition Analysis and Achievements**

### *Achievements*

2020 saw many accomplishments in the McCloud Battalion highlighted by the restarting of the McCloud and the Dunsmuir Fire Safe Councils. Fuel reduction work continued through the Fire Safe Council of Siskiyou County around the City of Mount Shasta, with fuel break projects utilizing chipper days, Deadwood Crews and Engine Companies within the Battalion. Engine crews began work on the Deetz Rd. project in 2020 and will continue in 2021. Deadwood Crews and Battalion Engine companies completed the Siskiyou 89 project in cooperation with CAL TRANS and began working on the Squaw Valley Fuel Break. Maintenance work continues for fuel reduction projects at Mt. Shasta Fish Hatchery and at the Mt. Shasta sewer ponds. Collaboration between CAL FIRE, the United States Forest Service, local Timber Companies, Fire Safe Councils and local Fire Departments for pre-fire planning and fire prevention will continue to be a priority in the Battalion. Defensible space inspections in the Battalion continued with an emphasis on compliance and public education. Timber companies continue to add fuel breaks while also maintaining existing fuel breaks and roadways. Collaboration with cooperators continues to be a critical asset in pre-planning and fire suppression.

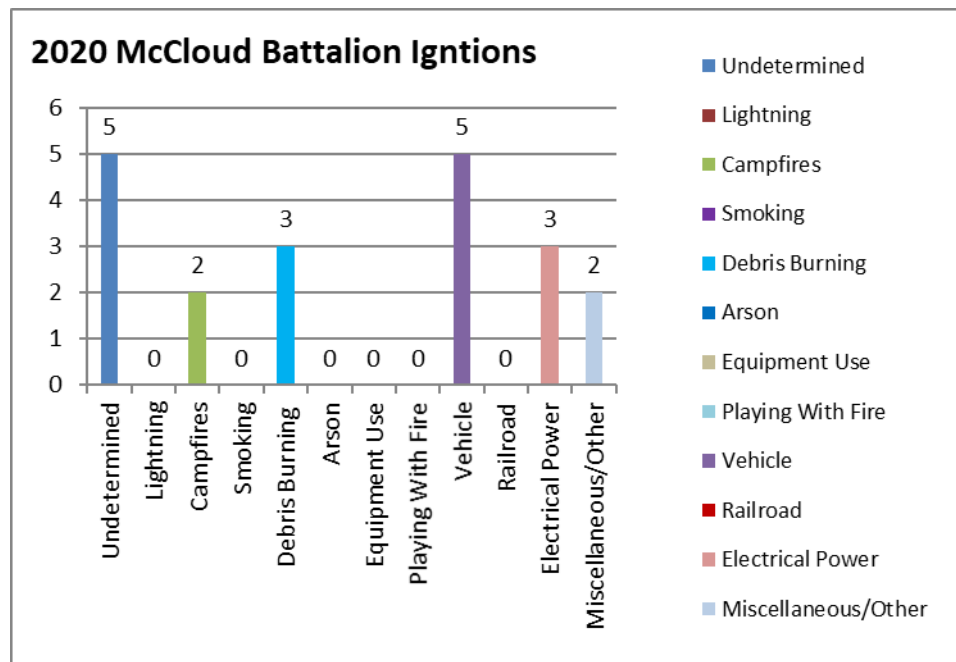
McCloud Battalion personnel are involved in the local Fire Safe Council and School programs in addition to outreach events designed to educate the public on the importance of wildfire awareness through various means such as the Ready, Set, Go, Code Red and defensible space programs. The McCloud Fire Safe Council was awarded a grant through CAL FIRE's California Climate Investments Fire Prevention Grant Program that will establish a shaded fuel break around the town of McCloud for \$775,066.00 with work continuing in 2021. The Siskiyou Unit is working with CAL TRANS on the reentry and maintenance of the Azalea Fuel break on Interstate 5 from Dunsmuir to Azalea Rd. This project will treat both sides of Interstate 5 within the CAL TRANS right-of-way. This is the first of three phases to treat fuels along the Interstate 5 Right-of-Way from Dunsmuir to Edgewood Rd

### *Ignition Analysis*

In 2020 there were a total of 20 ignitions, which was up from the 12 ignitions the previous year. The increase in ignitions in the Battalion was mostly due to an increase in tourism and outdoor recreation in the Battalion. Causes varied from abandoned campfires, debris burns, vehicle, undetermined/other, electrical power, and miscellaneous fires. The McCloud Battalion did not have any lightning fires in 2020. The remaining ignitions fell within historical averages. Early detection and aggressive initial attack contained all fires to less than 10 acres and a total of 10.19 acres, up by five acres from the year prior.

All human caused fire types will be addressed by targeted messaging and education of the public utilizing fire prevention signs, education outreach, and social media campaigns. Battalion personnel will work closely with the Prevention Bureau to gain more education and experience in preserving fire scenes along with conducting origin and cause investigations. The results of this will help decrease the number of undetermined fires in the Battalion.

Batt IV	Number	Acres
2020	by	Burned
	Causes	
Undetermined	5	1.2
Lightning	0	0
Campfires	2	1.1
Smoking	0	0
Debris Burning	3	3.29
Arson	0	0
Equipment Use	0	0
Playing With Fire	0	0
Vehicle	5	0.5
Railroad	0	0
Electrical Power	3	3
Miscellaneous/Other	2	1.1
<b>Total:</b>	<b>20</b>	<b>10.19</b>



## ***ANNUAL ACCOMPLISHMENTS REPORTING 2020***

### **Fire Planning:**

In 2020 fuel reduction work continued to be a priority on multiple CAL FIRE and Fire Safe Council projects. These projects included the Newton Broadcast Burn, Squaw Valley Fuel Break, Scott River Ranch VMP, Bogus Creek VMP, Castle Crags Project, Siskiyou County Flood Control, Deadwood Defensible Space, multiple USFS (KNF & SHF) projects, along with many other projects. Siskiyou Unit Personnel participated in the review and editing of various Community Wildfire Protection Plans including the Yreka Area CWPP Update.

The Siskiyou Unit recognizes the necessity for maintenance to be completed on multiple fuel breaks within the Unit. Maintenance grants have been challenging to obtain by Siskiyou County Fire Safe Councils. The Unit would be more fire resilient by maintaining and constructing strategically located fuel breaks rather than completing fuel breaks in non-strategic areas.

In 2020, CAL FIRE conducted the 5-year State Responsibility Area (SRA) review. The Siskiyou Unit proposed 34,462 acres of Local Responsibility Area (LRA) be converted to SRA. This proposal was approved by the California Board of Forestry and went into effect on July 1st of 2020.

### **Investigations and Enforcement:**

In 2020 the Siskiyou Unit investigated 167 total SRA fires with various causes, 114 of which were vegetation fires. The ignition analysis shows that vehicle caused fires were the major preventable cause of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to steadily increase. Nine fires within the Unit were determined to be caused by arson which was up from 7 last year and was up from the Unit average.

During the year, the Prevention Bureau took the following enforcement actions: 2 custodial fire related arrests, 8 citations, 1 District Attorney Complaints, and multiple assists to other law enforcement agencies. 44 LE-38 notices of fire hazard inspection were issued due to illegal burning within the Unit.

### **Wildland Fire Prevention Engineering:**

The Siskiyou Unit processed a total of 127 building permit applications and conducted 24 plan reviews in 2020.

**Education and Information:**

Fire prevention and education programs were conducted throughout the year. 2020 made it very challenging with the Covid-19 pandemic. These accomplishments included: 30 fire prevention signs that were displayed on major roadways, fire prevention messaging to over 20,000 people daily via social media, and 12,490 contacts with students through virtual school programs. The prevention bureau processed 9,490 defensible space inspections, an increase of 3,635 from the previous year. Unit Forestry Aids (DSI) were instrumental in completing these inspections. There were 167 media contacts made for fire information and/or prevention education. Numerous hours of staff time were spent with outreaches to local and federal government cooperators and fire safe councils in aiding them in fire prevention efforts.

**Vegetation Management:**

Fuel reduction work continues to be a priority within the Siskiyou unit. In 2019 many fuel reduction projects were completed as well as new projects planned. Fuel reduction work was completed on the 500-acre Vegetation Management Program (VMP) contract on the Ordway Ranch in Weed. Treatments included a hand and tractor piling, pile burning and prescribed burning. Prescribed fire burn preparation began on the 1400-acre Bogus Creek VMP in anticipation of burning in 2020. The Scott River Ranch VMP located in Scott Valley was approved in 2019 with preparation work beginning in 2020. Planning has begun for several other VMP and fuel reduction projects including the Golden Gate Flat VMP, several smaller VMPs in the Yreka area, the Azalea Fuel Break in Dunsmuir, and the Squaw Valley Fuel Break in McCloud.

**Volunteerism:**

Volunteers in Prevention put in 1000 plus hours of Fire Prevention activity. Volunteer hours were limited to the Honor Guard and training functions due to the challenges of Covid-19 pandemic.

**Fire Hazard Severity Mapping and Mitigation:**

No Fire Hazard Mapping was conducted in 2020 but it is expected that new Fire Hazard Severity Zone mapping will be completed in 2021. Fuel reduction projects to be conducted throughout Siskiyou County continue to be considered short term mitigations for fire hazard severity.

**Other Fire Prevention Projects in SRA:**

Numerous hours of staff time were spent in with Local and Federal government cooperators assisting them in combined fire prevention efforts. Staff hours were also spent aiding Fire Safe Councils in their fuel reduction and fire prevention education efforts.

## 2021 Siskiyou Unit Ignition Analysis

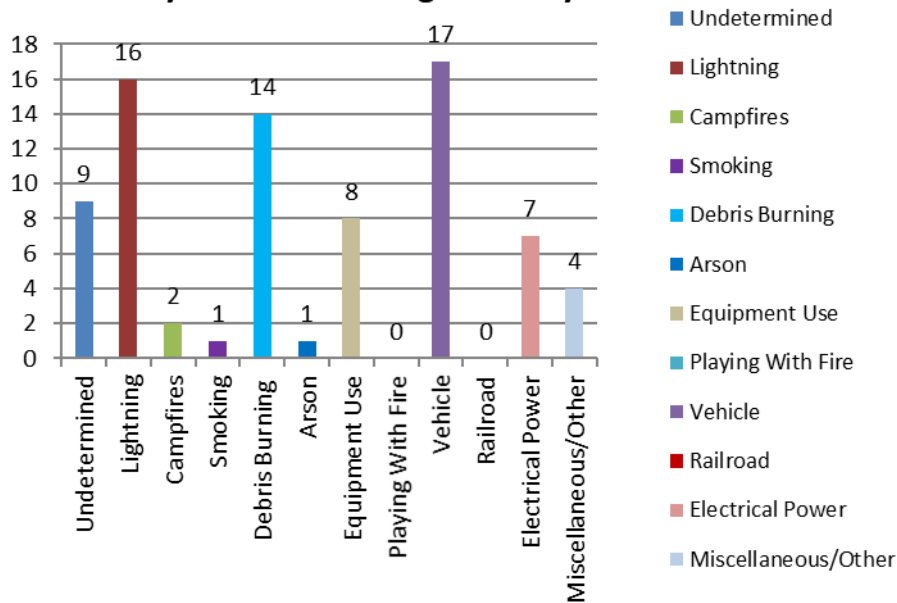
In 2021 the Siskiyou Unit had 79 vegetation fires that started in State Direct Protection Area (DPA). These fires burned 187.36 acres within the State DPA. This was down by 35 fires from the previous year and down about 32 from the average number of fires per year. The reduction in ignitions can be attributed to less than half the average number of lightning caused fires. Vehicle was the number one cause of ignitions within the Unit at 17 which is above average. The ignition analysis showed that vehicle caused fires were the major preventable cause of fires last year, almost two times the 5-year average. Acreage for fires in State DPA was almost half the 5-year average. All other ignitions in the Unit were near or below the 5-year average. GIS mapping data was collected for 9 SRA vegetation fires within the unit and submitted to the Fire and Resource Assessment Program for fire history data sets.

In addition to the 79 fires originating in State DPA, there were four Federal DPA fires that burned onto State DPA totaling 5680 (State DPA Burned) acres as well as one unprotected Local DPA fire totaling 874 acres. In 2021 the Siskiyou Unit was able to contain about 97 percent of the fires in State DPA to less than 10 acres, exceeding the Department's goal of 95 percent.

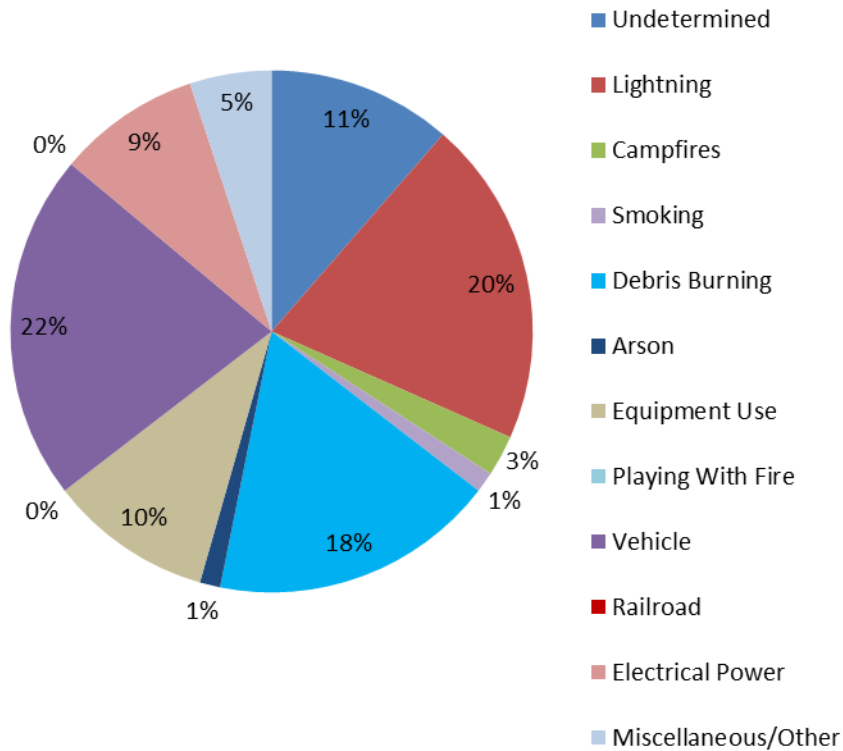
In 2022 the Siskiyou Unit will continue to focus on fire prevention education, fuel reduction, pre-fire planning, training, and aggressive initial attack to meet the goals of this Fire Plan.

SKU 2021 Causes	Number by Causes	Acres Burned	SKU 5-Year Averages	Average by Causes	Average Acres
Undetermined	9	13.72	Undetermined	15	31.3
Lightning	16	3.13	Lightning	35.6	96
Campfires	2	0.6	Campfires	2	1
Smoking	1	0.5	Smoking	1	1.4
Debris Burning	14	41.48	Debris Burning	16.4	28
Arson	1	0.5	Arson	6	8.5
Equipment Use	8	6.24	Equipment Use	9.6	6.5
Playing With Fire	0	0	Playing With Fire	0.2	0
Vehicle	17	1.16	Vehicle	10	2.2
Railroad	0	0	Railroad	0.6	0.6
Electrical Power	7	119.71	Electrical Power	7	33
Miscellaneous/Other	4	0.32	Miscellaneous/Other	8	99
	79	187.36		111.4	307.5

### 2021 Siskiyou Unit - Total Ignitons By Cause



### 2021 Siskiyou Unit Ignitons - Cause Percentages



## **Scott Valley Battalion 2021 Ignition Analysis and Achievements**

### **Achievements:**

In 2021, Battalion personnel worked throughout Siskiyou County on Unit fuel reduction projects. The Battalions personnel and equipment attributed to the Units successful completion of these critical projects. These projects will help protect Siskiyou County and Scott Valley communities and first responders from the damaging effects of catastrophic wildfires. Battalion personnel worked with local landowners and cooperators within Scott Valley to educate and assist them with fuel reduction projects utilizing broadcast burning to enhance agriculture production and fire safe landscapes. Opening and maintaining fire access roads continued to be a priority in the Battalion. Work continued through cooperation with private timber companies and landowners to open fire access roads that were previously impassable.

Private Timber Companies have continued fuel reduction efforts from Patterson Creek to the Crystal Creek accounting for about 11 miles of treatment varying in width from 600 feet to half a mile. They have also thinned along Sniktaw Road above Shackleford Creek and continue to work on improving ingress and egress routes. These projects seek to bolster and extend the Etna Fuel Break to protect of stakeholders on the west side of Scott Valley from wildfires. Local fire safe organizations have applied for grant funding to complete fuel reduction projects for the communities of Seiad Valley and Partridge Pines with treatments that focus on ingress and egress, defensible space for the disabled and elderly, and building continuity with other local fuel treatments.

The Scott River Water Shed Council and the Siskiyou Prescribed Burn Association have submitted grants for education and fuels reduction projects in Scott Valley that connect previously completed fuel breaks and proposed Fire Safe Council grant fuel breaks.

The Scott River Ranch VMP project in the McConaughy Gulch area of Scott Valley is in year 3 of a 10-year contract and will improve habitat and range land as well as reducing potential ignition and spread of catastrophic wildfires in the area. There have been several different treatments completed totaling about 270 acres utilizing mechanical thinning, mechanical piling, hand thinning, hand piling, pile burning, and broadcast burning. Future efforts will utilize the same treatment methods.

CAL FIRE personnel are currently in the planning phase of a new VMP project adjacent to the Scott River VMP that will be finalized in 2022 with similar goals and treatments objectives.

Battalion personnel continued to foster cooperative relationships with local and federal counterparts, participating in local and multi-agency training exercises. The battalion worked with the Units Fire Prevention Bureau participating in local events. This created direct contact with community members for public education. Fire Prevention education topics included the leading causes of fires within the battalion and unit. Scott Valley Battalion personnel completed over 150 LE-100 fire safety inspections within Scott Valley in 2021 to help ensure the safety of residents and first responders.

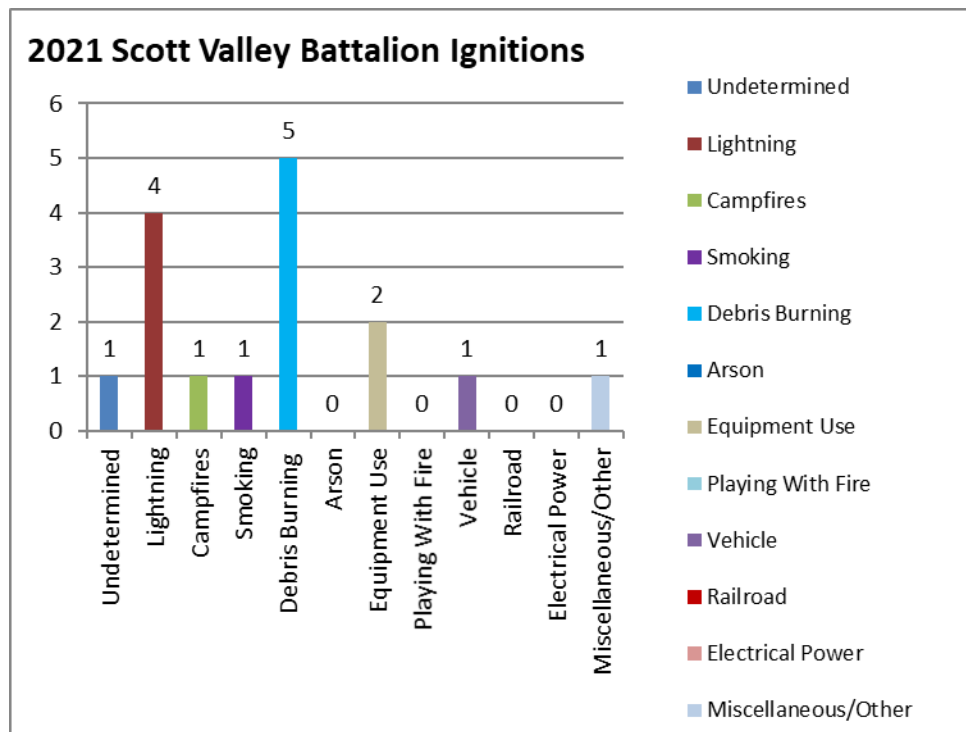
### Ignition Analysis:

In 2021, the Scott Valley Battalion had 16 ignitions totaling 8.02 acres, which was less than half from both the previous year and the 5-year average. This can be attributed to a decrease in lightning caused fires and focused fire prevention efforts. Debris burning was the leading cause of fires within the Battalion with 5 ignitions, which equals the 7-year average, totaling 6.16 acres burned. Lightning fires were second with 4 totaling 13 acres. Aggressive fire suppression, lookout staffing, landowner relationships and available suppression resources contributed to the quick containment and minimal acres burned in these ignitions.

Equipment use resulted in 2 fire ignitions while campfires, smoking, vehicle, other type and undetermined resulted in 1 ignition for each cause. All ignitions were near or below the 7-year average in yearly occurrence. Battalion personnel will continue to educate the public while issuing burn permits, complete burn pile inspections, and continue education efforts at local events.

In 2022 the Scott Valley Battalion will continue to look for opportunities to work with the community, cooperators, and stakeholders on fuel breaks in and around populated areas. The focus of these fuel breaks will be to improve ingress and egress routes within the battalion as well as protecting communities, critical infrastructure, and timber lands. The Battalion will also continue to identify locations for the implementation and completion of fuel reduction projects within these strategic locations. The goal for these projects will be to reduce available fuel for fire ignitions and reduce the spread of wildland fires within Scott Valley.

Batt I	Number	Acres
2021	by	Burned
	Causes	
Undetermined	1	0.3
Lightning	4	0.13
Campfires	1	0.1
Smoking	1	0.5
Debris Burning	5	6.16
Arson	0	0
Equipment Use	2	0.12
Playing With Fire	0	0
Vehicle	1	0.51
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	1	0.2
<b>Total:</b>	<b>16</b>	<b>8.02</b>



## **Shasta Valley Battalion 2021 - Achievements and Ignition Analysis**

### **Achievements:**

In 2021, the Shasta Valley Battalion was successful in keeping 97% of our fires to less than 10 acres. A 70% decrease in lighting activity, based on a seven-year average, had a part in this. Another contributing factor was the four significant Federal DPA fires in the area throughout the summer. These fires were a constant reminder to the public to be fire safe. Once again, the augmentation of an additional dozer, type one helicopter, and 40-person Firefighter hand crew aided with aggressive initial attack helped keep most of the new fire starts from developing into extended attack fires.

The Yreka Fire Safe council continued its efforts to collaborate and educate the public through zoom meetings in the area and sought more citizen involvement along with identifying funding for additional Fire Safe projects. The Fire Safe Council hopes to tie in past and current projects with the USFS Craggy Fuel Break project. The Craggy project will provide a fuel break on Humbug and Gunsight ridges helping to protect the city of Yreka and surrounding communities. Future projects are being discussed to protect all sides of the Yreka area.

Shasta Valley Battalion personnel in conjunction with other CAL FIRE Siskiyou Unit personnel completed the Newton prescribed fire project, located on the southern edge of Yreka City. This was an 83-acre broadcast burn project with an additional 6 acres of manual fuel treatment. The Battalion has plans to complete phase two of this project in the fall of 2022. Additional fuel reduction projects completed in 2021 were the BLM Humbug and BLM Yreka pile burning units.

Currently, CALFIRE is in the early planning phases with several fuel reduction projects around the Yreka area. Most of these projects are expected to tie into the current USFS Craggy Fuel project and past Fire Safe Council fuel reduction efforts.

### Ignition Analysis:

In 2021, the Shasta Valley Battalion saw a decrease in total ignitions. This reduction in total number of fires can most directly be associated with a below average amount of lighting caused fires.

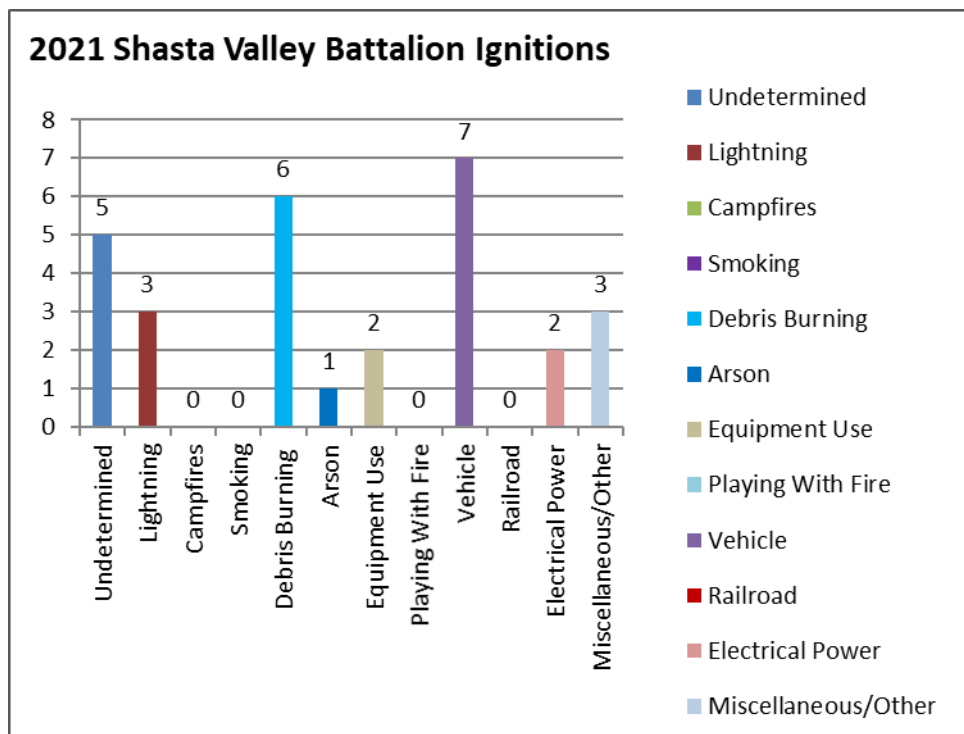
The leading cause of fires in the Battalion for 2021 was vehicle caused fires, with seven fire starts. However, almost all these fires were from a single moving vehicle along Interstate 5.

The largest fire in the Shasta Valley was the Beswick fire. The fire grew to approximately 118 acres. The Beswick fire was caused by electrical power. The Hovey Fire was the second largest at 9.5 acres. The Hovey Fire was a debris burn escape. The total debris burn caused fires exceeded the 7-year average. All other ignitions were at or below the historical averages.

Large fast-moving fires are becoming more of a trend throughout the state. Fuel reduction efforts within the Shasta Valley Battalion, will continue to focus on improving ingress and egress for communities, protecting critical infrastructure, and creating a fire resilient environment while protecting natural resources.

Battalion personnel will continue to educate the public through the burn permit process including burning regulations, site inspections and public outreach in conjunction with the Prevention Bureau. Battalion personnel will work closely with the Prevention Bureau to gain more education and experience in preserving fire scenes along with conducting origin and cause investigations. The results of this will help decrease the number of undetermined fires in the Battalion.

Batt II	Number	Acres
2021	by	Burned
	Causes	
Undetermined	5	6.02
Lightning	3	0.42
Campfires	0	0
Smoking	0	0
Debris Burning	6	12.35
Arson	1	0.5
Equipment Use	2	0.12
Playing With Fire	0	0
Vehicle	7	0.34
Railroad	0	0
Electrical Power	2	118.1
Miscellaneous/Other	3	0.12
<b>Total:</b>	<b>29</b>	<b>137.97</b>



## **Butte Valley / Weed Battalion 2021- Ignition Analysis and Achievements**

### *Achievements*

Battalion personnel assisted The Klamath National Forest with prescribed burns in the Tennant area with a 500-acre prescribed burn on the Klamath National Forest as well as the Bureau of Land Management with pile burning in Butte Valley. They also assisted with prescribed burns totaling over 2,500 acres with the USFWS in the Tulelake/State line area. Participating in these prescribed burns encourages interagency cooperation, area orientation and provides valuable training and experience to Battalion and Unit personnel.

The Butte Valley / Weed Battalion continues to focus on improving emergency ingress and egress routes for at-risk communities. Weed and Macdoel station personnel continued with local chipping projects in coordination with the Juniper Flat Fire Safe Council in Mt Shasta Vista and the Hammond Ranch Fire Safe Council. The focus of the chipping projects is to improve ingress and egress of easements in subdivisions where vegetation has built up and impedes civilian evacuation and emergency responder access. The Mt. Shasta Vista subdivision continues to be an area of concern for fuels reduction, ingress, and egress. This area is at high risk due to local wind patterns, extended response times, narrow winding roads and a high concentration of people. In February of 2020, the Juniper Flat Fire Safe Council received a CAL FIRE CCI Fire Prevention Grant for \$812,000 to complete 433 acres of fuel reduction (100ft each side) along the roads in the Mount Shasta Vista Sub-Division. The project will utilize mastication and chipper/chainsaw work to provide valuable ingress, egress, and defensible space for the citizens in that area. Work on this project began in 2021 is now near completion. Additional fuel reduction projects will continue to be evaluated and planned to protect communities, critical infrastructure, and natural resources in the Butte Valley / Weed Battalion.

### *Ignition Analysis*

In 2021, there were 21 ignitions in the Battalion, compared to 20 ignitions in 2020 and 30 in 2019. This is down 10 from 2019 and up 1 from 2020, 8 below the 7-year average for the Battalion. This is mainly the result of fewer lightning caused fires, focused fire prevention education, and widespread media coverage of recent large fires. In 2021 the total acreage burned in the Battalion was 38.74 acres, which is about 44 percent of the yearly average of 87.9 acres over the last 7 years. Resource availability, early detection, and aggressive initial attack aided in quick fire suppression keeping most fires within the Battalion less than 10 acres.

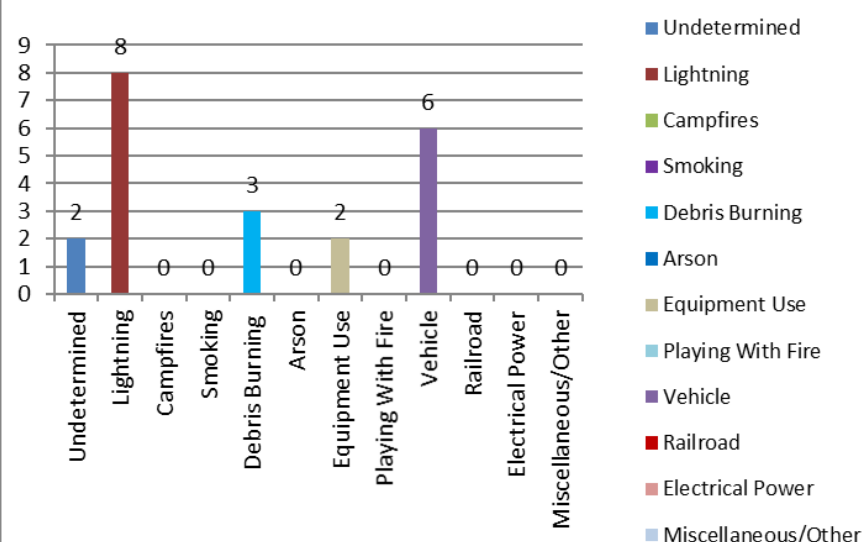
The leading causes for 2021 were lightning caused fires, undetermined fires, and vehicle caused fires. Lightning fires were well under the historical average whereas all other ignitions were near or below average. Historically lightning caused fires are the number one cause of fires in the Unit and Battalion. For this reason, work will continue with landowners and cooperating agencies to improve ingress and egress for areas with high lightning occurrence to aid in quick fire detection and suppression. In 2021, debris burning was about 60 percent lower

than the past 7 years. Battalion personnel will focus on increasing public education on safe burning in 2022 while working with the Public Information Officer to increase prevention efforts as this is historically the leading type of human caused fires. The Battalion had 2 fires that were undetermined which was down by 2 from last year. To better understand the fire problem in the Battalion, it is important to reduce the number of undetermined fires to better target prevention efforts. Battalion personnel will work with the Prevention Bureau to get additional training and experience with cause and origin investigations. Vehicle was determined as the cause of 6 fires which burned 0.19 acres. Vehicle caused fires increased from 2020 which will also be a focus of fire prevention in 2022.

The Butte Valley/ Weed Battalion will continue to focus on preventing and reducing the number of all vegetation fires through public education events, media, fuel reduction, pre-planning and any other means that are feasible. All other ignitions were near or below historical averages.

Batt III 2021	Number by Causes	Acres Burned
Undetermined	2	7.3
Lightning	8	2.48
Campfires	0	0
Smoking	0	0
Debris Burning	3	22.97
Arson	0	0
Equipment Use	2	5.8
Playing With Fire	0	0
Vehicle	6	0.19
Railroad	0	0
Electrical Power	0	0
Miscellaneous/Other	0	0
<b>Total:</b>	<b>21</b>	<b>38.74</b>

**2021 Butte Valley/Weed Battalion Ignitions**



## **McCloud Battalion 2021-Ignition Analysis and Achievements**

### *Achievements*

2021 saw many accomplishments in the McCloud Battalion highlighted by formation of Dunsmuir's Disaster Planning Advisory Committee board to work with the Siskiyou County Fire Safe Council on planning and completing fire prevention and fuel reduction work. Battalion personnel continued fuel reduction work on the Deetz Road project and on the Squaw Valley Fuel Break with work continuing in 2022. Maintenance work continues for fuel reduction projects at Mt. Shasta Fish Hatchery and at the Mt. Shasta sewer ponds. Collaboration between CAL FIRE, the United States Forest Service, local Timber Companies, Fire Safe Councils and local Fire Departments for pre-fire planning and fire prevention will continue to be a priority in the Battalion. Defensible space inspections in the Battalion continued with an emphasis on compliance and public education. Timber companies continue to add fuel breaks while also maintaining existing fuel breaks and roadways. Collaboration with cooperators continues to be a critical asset in pre-fire planning and fire suppression.

McCloud Battalion personnel continue to be involved with local fire prevention programs and outreach events designed to educate the public on wildfire awareness, Ready Set Go, Zone Haven evacuation system, Code Red, and defensible space programs. The McCloud Fire Safe Council Grant for a shaded fuel break around the town of McCloud is in progress and will continue through 2022.

The Siskiyou Unit is working with CAL TRANS, Shasta Valley RCD, and the Mount Shasta Fire Safe Council on the Azalea Fuel break on Interstate 5 from Dunsmuir to Azalea Rd. This project will treat both sides of Interstate 5 within the CAL TRANS right-of-way. This is the first of three phases to treat fuels along the Interstate 5 Right-of-Way from Dunsmuir to Edgewood Rd. Planning efforts continued in 2021 for several future fuel reduction projects including phase 2 of the Interstate 5 project and the Highway 89 fuels project.

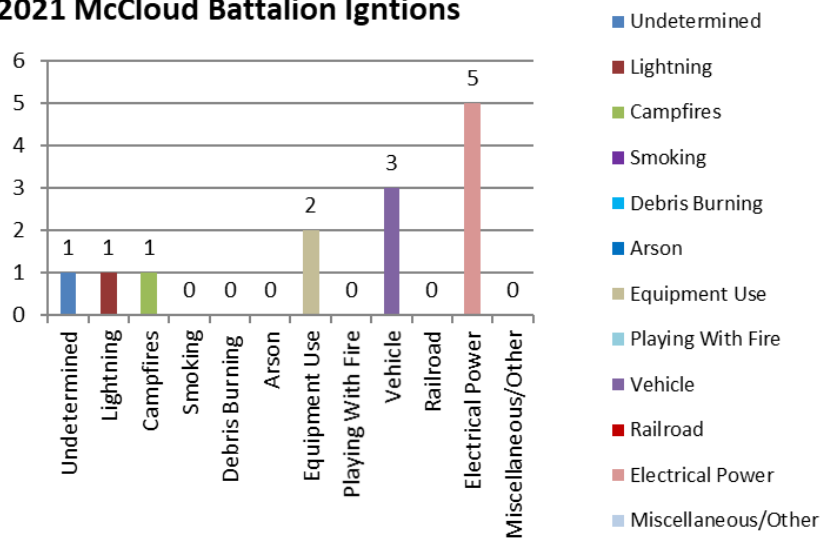
### *Ignition Analysis*

In 2021 there were a total of 13 ignitions, which was down from the 20 ignitions the previous year. The decrease in ignitions in the Battalion was mostly due to a reduction in lightning caused fires and fire prevention education. Causes varied from abandoned campfires, equipment use, vehicle, undetermined/other, electrical power, and Lightning. The McCloud Battalion did not have any Arson, Smoking, Debris Burning, Playing-with fire, or Railroad caused fires in 2021. All ignitions were at or below historical averages except Electrical Fires which had an increase from the previous year. Early detection and aggressive initial attack contained all fires to less than 2.63 acres, a decrease of 7.56 acres the previous year.

All human caused fire types will be addressed by targeted messaging and education of the public utilizing fire prevention signs, education outreach, and social media campaigns. Battalion personnel will work closely with the Prevention Bureau to gain more education and experience in preserving fire scenes along with conducting origin and cause investigations.

Batt IV 2021	Number by Causes	Acres Burned
Undetermined	1	0.1
Lightning	1	0.1
Campfires	1	0.5
Smoking	0	0
Debris Burning	0	0
Arson	0	0
Equipment Use	2	0.2
Playing With Fire	0	0
Vehicle	3	0.12
Railroad	0	0
Electrical Power	5	1.61
Miscellaneous/Other	0	0
<b>Total:</b>	<b>13</b>	<b>2.63</b>

**2021 McCloud Battalion Ignitions**



## ***ANNUAL ACCOMPLISHMENTS REPORTING 2021***

### **Fire Planning:**

In 2021 fuel reduction work continued to be a priority on multiple CAL FIRE and Fire Safe Council projects. These projects included the BLM Yreka Project, Azalea Fuel Break, Squaw Valley Fuel Break, Scott River Ranch VMP, Castle Crags Project, the Craggy GNA, Siskiyou County Flood Control, Deadwood Defensible Space, multiple USFS (KNF & SHF) projects, along with many other projects. Siskiyou Unit Personnel participated in the review and editing of various Community Wildfire Protection Plans including the Yreka Area CWPP Update.

The Siskiyou Unit recognizes the necessity for maintenance to be completed on multiple fuel breaks within the Unit. Maintenance grants have been challenging to obtain by Siskiyou County Fire Safe Councils. The Unit would be more fire resilient by maintaining and constructing strategically located fuel breaks rather than completing fuel breaks in non-strategic areas.

### **Investigations and Enforcement:**

In 2021 Siskiyou Unit Law Enforcement Officers responded to 370 various calls for service. Of these calls for service, Officers Investigated 77 SRA vegetation fires with various causes, 18 structure fires, and 121 other type fires. The ignition analysis shows that vehicle caused fires were the major preventable cause of fires last year. In addition to debris burn escapes, investigating illegal burning was a main activity for Unit personnel and prevention investigators. Illegal burn investigations associated with marijuana cultivation continues to steadily increase. During the year, the Prevention Bureau took the following enforcement actions: 12 custodial arrests and Misdemeanor Citations and over 20 infraction citations issued. CAL FIRE Law Enforcement Officers assisted other law enforcement agencies approximately 95 times throughout the year. A total of 36 LE-38 notices of fire hazard inspection were issued due to illegal burning within the Unit.

### **Wildland Fire Prevention Engineering:**

The Siskiyou Unit processed a total of 134 building permit applications and conducted 62 plan reviews in 2021.

**Education and Information:**

Fire prevention and education programs were conducted throughout the year. 2021 made it very challenging with the Covid-19 pandemic. These accomplishments included: 30 fire prevention signs that were displayed on major roadways, fire prevention messaging to over 20,000 people daily via social media, and 13,000 contacts with students through virtual school programs. The prevention bureau processed 8,035 defensible space inspections. Unit Forestry Aids (DSI) were instrumental in completing these inspections. There were 167 media contacts made for fire information and/or prevention education. Numerous hours of staff time were spent with outreaches to local and federal government cooperators and fire safe councils in aiding them in fire prevention efforts.

**Vegetation Management:**

Fuel reduction work continues to be a priority within the Siskiyou unit. In 2019 many fuel reduction projects were completed as well as new projects planned. Fuel reduction work was completed on the 500-acre Vegetation Management Program (VMP) contract on the Ordway Ranch in Weed. Treatments included a hand and tractor piling, pile burning and prescribed burning. Prescribed fire burn preparation began on the 1400-acre Bogus Creek VMP in anticipation of burning in 2020. The Scott River Ranch VMP located in Scott Valley was approved in 2019 with preparation work beginning in 2020. Planning has begun for several other VMP and fuel reduction projects including the Golden Gate Flat VMP, several smaller VMPs in the Yreka area, the Azalea Fuel Break in Dunsmuir, and the Squaw Valley Fuel Break in McCloud.

**Volunteerism:**

Volunteers in Prevention put in 1200 plus hours of Fire Prevention activity. Volunteer hours were limited to the Honor Guard and training functions due to the challenges of Covid-19 pandemic.

**Fire Hazard Severity Mapping and Mitigation:**

No Fire Hazard Mapping was ongoing 2021 and it is expected that new Fire Hazard Severity Zone mapping will be completed for State Responsibility Area in 2022. Local Responsibility Area should begin in the fall of 2022. Fuel reduction projects to be conducted throughout Siskiyou County continue to be considered short term mitigations for fire hazard severity.

**Other Fire Prevention Projects in SRA:**

Numerous hours of staff time were spent in with Local and Federal government cooperators assisting them in combined fire prevention efforts. Staff hours were also spent aiding Fire Safe Councils in their fuel reduction and fire prevention education efforts.